

Technical Data Data Sheet N0223, Rev. - **Green Products**

SMAJ SERIES SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

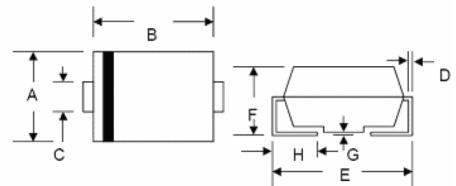
Features:

- Glass Passivated Die Construction
- 400W Peak Pulse Power Dissipation
- 5.0V- 170V Standoff Voltage
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- This is a Pb Free Device
- All SMC Parts are Traceable to the Wafer Lot
- Additional testing can be offered upon request

Mechanical Data:

- Case: JEDEC DO-214AC Low Profile Molded Plastic
- Terminals: Solder Plated , Solderable per MIL-STD 750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight:0.064 grams(approx.)

Mechanical Dimensions: In Inches (mm)



	SMA/DO-214AC					
Dim.	Min.	Max.	Min.	Max.		
Α	2.50	2.90	0.098	0.114		
В	4.00	4.60	0.157 0.18			
С	1.40	1.60	0.055	0.063		
D	0.152	0.305	0.006	0.012		
Е	4.80	5.28	0.189	0.208		
F	2.00	2.44	0.079	0.096		
G	0.051	0.203	0.002	0.008		
Н	0.76	1.52	0.030	0.060		
	In r	nm	In inch			

SMA

• China - Germany - Korea - Singapore - United States •

http://www.smc-diodes.com - sales@ smc-diodes.com •

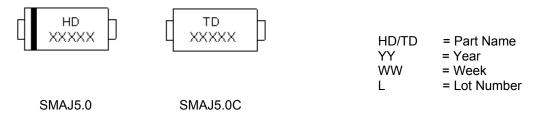


Technical Data Data Sheet N0223, Rev. -

Green Products

Marking Diagram:

Where XXXXX is YYWWL



Cautions: Molding resin Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
	SMA	
SMAJ SERIES	(Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation at T _A =25°C by 10x1000µs Waveform (Fig.1)(Note 1, 2, 5)	Рррм	400	w
Peak Forward Surge Current, 8.3ms Single Half Sine Wave (Fig.5),(Note 3)	IFSM	40	А
Peak Pulse Current on 10x1000µs Waveform(Fig.2)(Note 1)	Іррм	See Table 1	А
Steady State Power Dissipation(Note 4)	PM(AV)	1.0	W
Operating Junction and Storage Temperature Range	Tj,Tstg	-55 to 150	°C

Notes: 1. Non-repetitive current pulse, per Fig. 3 and derated above TA = 25°C per Fig. 2.

2. Mounted on 5.0mm² copper pads to each terminal.

3. Measured on 8.3ms single half sine wave or equivalent square wave, duty cycle=4pulses per minute maximum.

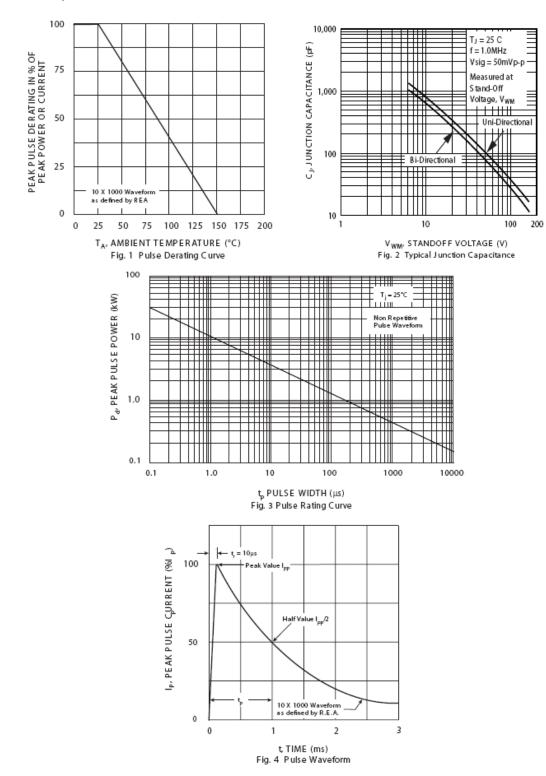
- 4. Lead temperature at 75°C=T_L
- 5. Peak pulse power waveform is $10 x 1000 \mu s$



400W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Green Products

Technical Data Data Sheet N0223, Rev. -

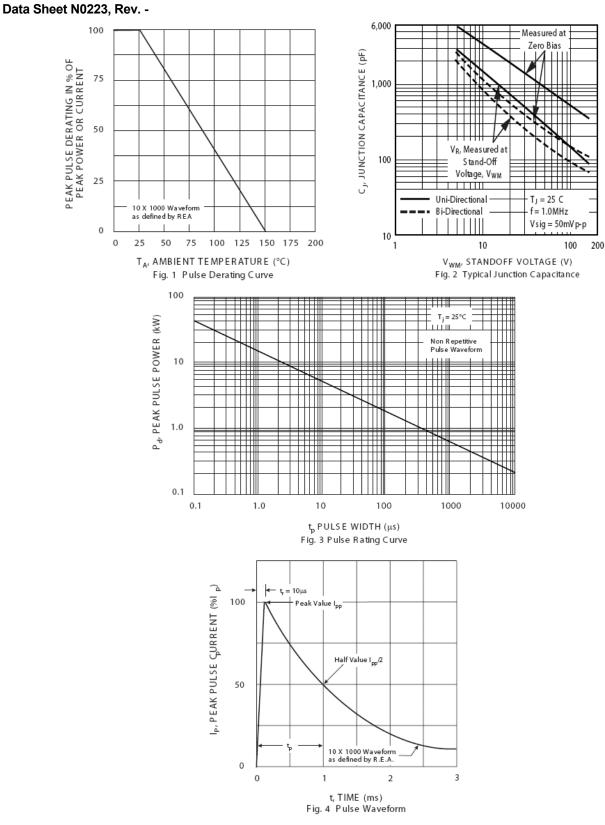




Technical Data

SMAJ SERIES 400W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Green Products



China - Germany - Korea - Singapore - United States http://www.smc-diodes.com - sales@ smc-diodes.com -



SMAJ SERIES 400W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Green Products

Technical Data Data Sheet N0223, Rev. -

UNI-DIRECTIONAL 400 WATT SURFACE MOUNT TVS

DEVICE BATHECTORY REVEREE UNIT REVERCE VOLTAGE REVERCE VOL	UNI-DIREC	HONAL 4	WATT	SURFACI		103			
SUX.50 HD 500 560 782 10 9.8 4.16 900 SUX.50.0 HE 600 667 7.37 10 10.3 2.55 900 SUX.60.0 HE 600 667 7.37 10 11.3 2.52 900 SUX.60.0 HE 600 7.72 9.8 10 11.3 2.52 900 SUX.70.0 HM 7.70 7.78 9.8 10 11.3 2.51 900 SUX.70.1 HM 7.70 7.78 9.8 10 11.3 2.51 900 SUX.70.1 HM 7.00 7.78 9.8 1 1.52 9.9 900 900 900 1 1.52 1.52 9.0 9.0 9.0 1.53 2.50 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 <td< th=""><th>UNI-DIRECTIONAL</th><th>MARKING</th><th>STAND-OFF VOLTAGE</th><th>VOLTAGE VBR (V) MIN.</th><th>VOLTAGE VBR (V) MAX.</th><th>CURRENT</th><th>CLAMPING VOLTAGE @lpp</th><th>CURRENT</th><th>LEAKAGE @VRWM IR</th></td<>	UNI-DIRECTIONAL	MARKING	STAND-OFF VOLTAGE	VOLTAGE VBR (V) MIN.	VOLTAGE VBR (V) MAX.	CURRENT	CLAMPING VOLTAGE @lpp	CURRENT	LEAKAGE @VRWM IR
SMAGA HE 500 640 70° 10 9.2 4.15 000 SMAGA HE 600 607 5.15 10 11.3 3.16 600 SMAGA HE 650 722 7.92 10 11.2 3.25 500 SMAGA HE 650 722 7.96 10 11.2 3.33 0.33 SMAGA HE 650 727 6.97 10 11.2 3.33 0.33 SMAGA HE 650 727 6.97 1 14.3 3.26 100 SMAGA HE 650 9.9 9.9 1 13.8 2.24 9 SMAGA HE 650 10.00 11.02 1 14.8 2.56 5 SMAGA HU 600 10.00 11.02 1 1.23 1.6 5 SMAGA HU 1000 11.00 1 1.23 1									
BMAG 0 HF 000 467 0.15 10 11.4 35.1 000 BMAG 2 101 103 335 400 BMAG 2 101 103 335 400 BMAG 2 101 103 357 500 BMAG 2 104 750 773 616 1 133 250 100 SMAF 3 104 750 735 016 1 143 250 100 SMAF 3 104 750 750 103 116 1 130 254 90 SMAG 3 107 1000									
SMAGA HG 600 697 7.37 10 103 108 800 SMAGA HK 760 773 9.91 10 113 301 300 SMA70 HK 700 773 9.91 10 113 301 300 SMA70 HK 700 773 9.91 1 1130 301 300 SMA70 HK 700 773 9.91 1 1130 100 100 SMA70 HK 700 770 100 1 1130 100 100 SMA10 HG 100 100 110 102 1 164 221 5 SMA10 HW 1000 1110 102 1 102 1 100 100 1 100 100 1 100 100 1 100 100 1 100 100 1 100 100 100 100									
SAUK 5 HH 650 722 1 4 B2 10 123 225 500 SAUK 2 A HK 650 722 7 96 10 133 235 500 SAUK 2 A HK 750 630 10 133 233 200 SAUK 2 A HK 750 630 11 1 143 230 200 SAUK 2 A HK 750 630 93 1 136 224 90 SAUK 3 A HK 630 94 1 136 224 90 SAUK 3 A HK 630 100 100 1 143 216 5 SAUK 3 A HK 1000 1100 1 143 216 5 SAUK 3 A HK 1000 1100 1 220 200 5 SAUK 3 A HK 1000 1100 1 220 100 5 SAUK 3 A HK </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
BAM.SA. HK 600 722 7 /8 10 112 557 500 BAM.76 HM 750 758 51 10 132 201 200 BAM.76 HP 750 635 0.13 1 142 200 100 BAM.76 HP 750 635 0.14 1 142 200 100 BAM.60 HB 600 939 134 1 152 21 100 BAM.80 HB 600 10.02 1 146 224 5 BAM.80 HV 600 10.03 1 162 1 123 12 5 BAM.70 HV 10.03 14.03 1 123 121 5 BAM.71 HV 10.03 14.03 1 224 15 5 BAM.71 HV 10.03 14.03 1 224 15 5 B									
SMU70 HL 7.00 7.78 9.51 10 13.3 30.1 200 SMU70 HO 7.00 7.28 4.00 10 12.0 53.10 200 SMU70 HO 6.00 6.33 9.21 1 12.0 53.0 200 SMU70 HO 6.00 6.33 9.21 1 13.0 22.6 50 SMU70 HO 6.00 1.04 1.1 13.0 22.6 50 SMU70 HU 6.00 1.00 12.2 1 16.4 23.5 5 SMU70 HU 10.00 11.0 12.27 1 17.0 23.6 5 SMU72 O 12.00 13.30 14.70 1 18.0 16.1 5 SMU72 O 12.00 13.30 14.70 1 18.0 16.1 5 SMU72 O 12.00 13.0 14.70 1 18.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SMU/7 A. HW 700 776 4.00 10 120 133 200 SMU/5 A. HW 705 4.03 913 1 143 24.0 100 SMU/6 A. HB 4.00 4.93 918 1 150 22.6 90 SMU/6 A. HB 4.00 4.93 94.1 1.56 22.4 1.00 SMU/6 A. HB 4.00 1.00 11.05 1 1.54 23.0 5 SMU/6 A. HU 0.00 11.00 1 1.55 23.0 5 SMU/1 A. HV 1.00 11.00 1.105 1 1.13 20.0 5 SMU/1 A. HV 1.00 11.20 1.04 1 1.23 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 <									
BAU/5 IH 750 833 914 1 143 28.0 100 BAU20 IIIO 100 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
BMUTSA HP2 750 B33 921 1 122 31.0 100 BMULSA HG2 6.00 6.90 10.44 1 153 25.5 30 BMULSA HT 6.00 6.04 10.44 1 163.9 25.5 30 BMULSA HT 6.00 0.00 11.02 1 164.9 25.6 5 BMULSA HT 10.00 11.10 11.57 1 164.9 25.0 5 BMULSA HW 10.00 11.10 11.57 1 17.3 23.1 5 BMULSA HW 10.00 11.30 14.20 1 12.03 14.0 1 13.9 21.6 15 5 BMULSA F 10.00 11.50 12.6 1 21.5 15.6 5 5 BMULSA H 10.00 15.70 12.4 1 23.9 14.6 5 BMU									
BMABA HB 400 492 9.4 1 136 23.4 490 BMABA HB 650 14.4 1154 1 154 25.7 100 BMABA HV 600 10.0 112.2 1 145.9 21.6 5 BMABA HV 10.00 11.0 11.07 1 16.0 21.6 5 BMABA HV 10.00 11.20 14.40 1 12.2 21.6 5 BMAHA HV 10.00 11.20 14.40 1 12.2 16.0 5 BMAHA HV 10.00 11.40 17.0 1 22.8 16.8 5 BMAHA H 10.00 11.40 17.0 1 23.8 16.8 5 BMAHA H 10.00 11.60 10.7 24.4 1 24.6 16.4 5 BMAHA H 10.00 11.7 10.40	SMAJ7.5A	HP	7.50	8.33	9.21		12.9	31.0	100
SWUS5 H6 650 944 154 1 159 251 00 SWUS5A HT 600 10.00 11.05 1 144 277.5 10 SWUS6A HW 10.00 11.05 1 154 22.0 5 SWUS7 HW 10.00 11.05 1 17.0 23.5 5 SWUS7 HW 10.00 11.00 12.24 1 17.0 23.5 5 SWUS7 D 12.00 13.30 14.28 1 21.5 16.6 5 SWUS7 D 12.00 13.30 14.20 1 23.5 15.5 5 SWUS7 D 12.00 13.40 14.24 1 23.5 15.5 5 SWUS7 M 12.00 12.44 1 23.6 13.5 5 SWUS7 M 16.00 17.00 17.00 10.00 20.00 24.4 1	SMAJ8.0	HQ	8.00	8.99	10.99	1	15.0	26.5	50
BAUGASA HIT 8.50 9.44 10.40 1 14.64 2.77 10 BAUGASA HUV 9.00 11.00 12.28 1 16.4 2.12 5 BAUGASA HIX 11.00 12.27 1 17.00 2.12 5 BAUGASA HIX 11.00 12.20 14.44 1 2.02 2.03 5 BAUGASA HIX 11.00 12.20 14.44 1 2.02 16.1 5 BAUGASA E 12.00 13.30 14.70 1 12.92 15.8 5 BAUGASA F 12.00 13.30 14.70 1 2.52 15.8 5 SAUGASA F 12.00 15.80 19.07 1 2.54 16.8 5 SAUGASA H 14.00 15.80 17.24 1 2.52 15.2 5 SAUGASA H 15.00 17.76 2.78 <									
SMU80 HU 800 10.00 12.22 1 189 2.38 5 SMU30A HU 800 11.00 11.05 1 15.2 5 SMU30A HU 10.00 11.00 12.20 14.41 120 22.0 5 SMU30A HU 10.00 12.20 14.41 1 20.0 5 SMU30A F 12.00 11.00 14.70 1 12.00 15.5 SMU30A F 13.00 14.40 15.00 1 22.1 15.5 SMU30A H 15.00 16.00 17.7 1 22.0 17.2 5 SMU30A H 15.00 16.00 20.4 1 22.0 16.5 5 SMU30A H 15.00 16.00 20.4 1 22.0 15.5 5 SMU30A H 15.00 20.4 1 22.0 15.5 5									
BMUB0A IIV 900 1000 1105 1105 1157 16.8 21.2 5 BMU10 IIV0 1100 1120 14.37 1 120.1 22.0 5 BMU11 IIV7 1100 1120 14.38 1 122.0 13.30 BMU12 ID 1200 13.30 14.20 1 22.0 15.1 5 SMU12 ID 1200 13.30 14.20 1 22.0 15.5 5 SMU13 IF 13.00 14.40 15.82 1 22.15 16.40 5 SMU14 IF 16.00 17.00 12.84 1 22.44 14.44 5 SMU16 IF 16.80 27.10 1 23.84 13.1 5 SMU17 IF 17.00 16.90 22.10 1 23.44 14.22 14.4 14.5 SMU17 IF 17.00 16.90 22.									
SMUTO HW 10.00 11.10 11.57 1 18.8 21.2 5 SMUTO HZ 10.00 11.00 12.20 1 17.00 22.5 5 SMUTO HZ 10.00 12.20 13.80 1 12.20 15.30 14.80 1 12.20 15.30 14.70 1 18.9 22.1 5 SMUTO E 12.00 15.30 14.70 1 18.9 22.1 5 SMUTO F 12.00 15.30 14.70 1 22.5 15.5 5 SMUTO F 16.00 17.60 21.78 1 22.6 15.3 5 SMUTO F 16.00 17.60 21.78 1 22.6 15.3 5 SMUTO F 16.00 20.00 24.44 1 3.5 11.3 5 SMUTO F 16.00 20.00 24.44 1 3.4 <									
SMU-10h HIX 10.00 11.10 12.27 1 17.0 23.5 5 SMU-12 11.00 12.30 14.40 1 20.1 20.0 5 SMU-13 F 13.00 14.40 1 16.80 12.30 14.60 15.90 1 21.8 16.8 5 SMU-13 F 13.00 14.40 17.60 1 23.8 16.8 5 SMU-14 F 13.00 14.60 15.00 1 23.4 14.8 5 SMU-14 K 14.00 15.00 17.24 1 23.2 17.2 5 SMU-14 M 15.00 16.70 23.41 1 23.2 13.3 5 SMU-17 K0 17.00 18.90 23.10 1 32.5 13.1 5 SMU-17 K0 17.00 18.90 23.04 1 23.4 14.5 5 SMU-17 K0									
SMU11 HY 1100 12.20 14.91 1 201 20.0 5 SMU11A HZ 1100 12.20 13.30 11.20 12.20 13.30 12.20 13.30 12.20 13.30 12.20 13.30 12.20 13.30 14.20 12.20 13.30 14.20 12.20 13.30 14.20 12.20 13.30 14.20 12.20 13.30 14.20 12.20 13.30 14.20 12.20 14.20 12.20 13.30 14.20 12.20 14.20 12.20 14.20 12.20 14.20 12.20 14.20 12.20 14.20 12.20 12.40 14.20 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 12.40 12.20 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
SWU1A HZ 11.00 12.20 13.40 1 142 22.00 15. SWU12 D 12.00 13.30 14.70 1 19.31 20.1 5 SWU13 E 12.00 13.30 14.70 1 19.31 20.1 5 SWU13 15 13.00 14.64 15.82 1 22.63 15.5 5 SWU14 H1 14.00 15.00 17.24 1 22.63 15.5 5 SWU16 N 16.00 17.00 12.78 1 22.64 16.4 5 SWU16 N 16.00 17.00 10.97 1 22.63 13.1 5 SWU16 N 16.00 20.00 24.44 1 32.2 14.2 5 SWU170 P 16.00 20.00 24.60 29.82 1 34.4 10.1 5 SWU20 22.00 24.60 29.82									
SMA12 D 12.00 13.30 14.20 1 220 16.1 5 SMA13A F 13.00 14.40 17.60 1 235 16.8 5 SMA16 H 14.00 15.80 10.97 1 235 15.5 5 SMA16 H 14.00 15.80 17.24 1 232.6 17.2 5 SMA16 H 16.00 17.80 17.86 1 236.0 15.3 5 SMA16 H 16.00 17.80 19.87 1 236.0 15.3 5 SMA17 D 17.00 18.90 23.00 1 335.5 11.1 5 SMA16 H 16.00 22.00 22.44 1 222.2 14.4 5 SMA20 D 22.00 22.87 1 355.5 11.1 5 SMA20 D 22.00 28.97 1 355.5 11.2									
Skulizh E 12.00 13.20 14.70 1 198 20.1 5 Skulizh F 13.00 14.40 15.90 1 23.5 16.5 5 Skulizh K 14.00 15.90 17.24 1 23.5 16.5 5 Skulizh K 15.00 16.70 20.41 1 24.6 16.4 5 Skulizh M 16.00 16.70 20.41 1 24.6 16.4 5 Skulizh M 16.00 17.00 16.80 20.89 1 23.5 11.3 5 Skulizh R 17.00 16.80 20.89 1 23.5 14.5 5 Skulizh R 17.00 16.80 20.89 1 35.6 11.1 5 Skulizh R 12.00 22.20 24.54 35.2 14.68 8.6 5 Skulizh JD 24.00 28.8									
SMU13 F 13.00 14.40 17.00 1 23.8 18.8 5 SMU14 16 13.00 14.40 15.90 17.2 1 23.5 16.2 5 SMU15 L 15.00 16.70 22.41 1 23.5 16.2 5 SMU15 N 15.00 16.70 22.41 1 23.6 13.8 5 SMU16 N 16.00 17.7 10.84 1 24.6 13.8 5 SMU17 P 17.00 17.80 13.10 1 23.5 13.1 5 SMU16 S 18.00 20.00 22.44 1 32.2 13.7 5 SMU16 S 18.00 20.00 22.41 1 32.6 11.2 5 SMU22 W 22.00 24.40 29.7 1 35.5 11.2 5 SMU22 W 22.00 24.60 29.7 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.45.1</td> <td></td>								1.45.1	
SMU13 IG 1.00 1.4.00 15.20 1 21.5 18.8 5 SMU14 H 14.00 15.90 17.24 1 23.28 17.2 5 SMU16A K 14.00 15.90 17.24 1 23.28 17.2 5 SMU16A N 16.00 17.80 12.84 1 22.2 12.4 5 SMU16A P 16.00 17.80 18.87 1 23.6 11.3 5 SMU16A P 16.00 20.00 22.11 1 23.22 12.4 5 SMU16A IT 18.00 20.00 22.21 1.4 1 22.3 1.4 5 SMU20A IV 20.00 22.20 2.21 1.4 1.4 1.6 1.5 5 SMU20A IV 24.00 2.877 2.83 1 4.30 9.3 5 SMU20A JV 2.400									
SMU14 H 14.00 15.90 19.07 1 25.8 15.5 5 SMU14 IK 14.00 15.90 17.24 1 2.22 17.2 5 SMU16 IK 16.00 16.70 2.44 1 2.44 14.4 5 SMU16 IK 16.00 17.80 2.178 1 2.60 15.3 5 SMU16 IK 17.00 18.90 2.178 1 2.60 15.3 5 SMU16 IG 17.00 18.90 2.210 1 2.52 17.1 5 SMU20 IV 2.00 2.220 2.211 1 3.54 12.3 5 SMU20 IV 2.00 2.240 2.571 1 3.54 12.3 5 SMU20 IV 2.00 2.570 2.531 1 3.69 5 SMU23 JF 2.00 2.580 3.14 1 6.51									
SMAL16A IK 14.00 15.00 17.24 1 22.0 17.2 5 SMAL15A M. 15.00 16.70 20.41 1 22.69 16.6 5 SMAL15A M. 15.00 16.70 10.46 1 22.6 16.5 5 SMAL17A IP 17.00 16.80 20.10 1 30.5 13.1 5 SMAL17A IP 17.00 16.80 20.89 1 22.76 14.1 32.2 12.7 5 SMAL20 IF 20.00 22.20 24.44 1 32.6 11.7 5 SMA22A IF 20.00 22.80 24.60 29.82 1 39.4 10.1 5 SMA22A IF 22.00 24.40 29.82 1 39.8 10.3 5 SMA22A IF 24.00 33.30 39.81 1 46.8 5 5 SMA22A IF	SMAJ14								
SMAL16 M 15:00 16:70 10:80 1 24.4 16:44 5 SMAL16 P 16:00 17:30 21:78 1 26.8 15:5 5 SMAL16 P 16:00 17:30 21:78 1 22.6 15:5 5 SMAL16 IB 16:00 20:00 24:44 1 22.2 12:4 5 SMAL20 IJ 20:00 22:20 27:11 1 35.4 11:1 5 SMAL20 IJ 20:00 22:20 24:54 1 35.4 11:1 5 SMA224 IZ 24:00 22:80 24:51 1 35.4 11:2 5 SMA24 IZ 24:00 28:80 38:32 1 468 68 5 SMA26 JD 26:30 28:30 38:32 1 468 68 5 SMA26 JD 26:00 33:30 40:70		IK	14.00		17.24	1		17.2	
SMU-16 N 16:00 17.00 17.00 18.00 10.00 17.00 18.00 21.00 1 20.00 15.31 5 SMU-17 IG 17.00 18.00 21.00 1 30.5 13.1 5 SMU-17 IG 17.00 18.00 22.00 1 1 20.5 14.5 5 SMU-10 IC 18.00 22.00 22.41 1 22.0 1.5 5 SMU-20 IV 20.00 22.20 24.44 1 23.4 1.0 5 SMU-22A IV 22.00 24.40 28.62 1 38.4 10.1 5 SMU-22A IV 22.00 24.40 28.91 1 38.9 0.3 5 SMU-22A IV 22.00 28.90 35.22 1 46.8 6.8 5 SMU-22A IV 22.00 31.80 36.7 45.8 6.8 5									
SNAL16A IP 16.00 17.20 19.67 1 220 15.3 5 SMAL17A IR 17.00 18.30 22.89 1 27.8 14.5 5 SMAL18 I 16.00 20.00 22.20 27.13 1 35.2 12.7 5 SMAL20 IU 20.00 22.20 27.13 1 35.2 12.7 5 SMAL22 IW 22.00 24.40 29.82 1 38.4 10.1 5 SMA224 IY 22.00 24.40 29.82 1 38.4 10.1 5 SMA224 IZ 24.00 28.90 31.54 1 44.6 6.6 5 SMA236 JZ 20.00 33.10 30.70 1 44.6 6.5 5 SMA236 JZ 20.00 33.30 30.70 1 44.6 6.5 5 SMA236 JZ 20.00 33.30									
SMA(17) IQ 17.00 18.80 23.10 1 305 13.1 5 SMA(18) IS 16.00 20.09 1 222 12.4 5 SMA(18) IS 16.00 20.00 22.44 1 32.4 11.1 5 SMA(20) IV 20.00 22.20 25.44 1 32.4 12.3 5 SMA(22) IX 22.00 24.40 29.82 1 39.4 10.1 5 SMA(22) IX 22.00 24.40 29.82 1 39.4 10.1 5 SMA(24) IX 22.00 24.60 29.82 1 44.0 0.5 5 SMA(26) IF 28.00 31.10 30.01 1 50.0 0.5 5 SMA(26) JF 28.00 31.10 30.01 1 55.0 5 5 SMA(26) JF 28.00 31.10 30.01 1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SIMU17a IR 17.00 18.00 20.00 24.44 1 32.2 12.4 5 SIMU18 IT 18.00 20.00 22.211 1 22.2 13.7 5 SIMU20 IV 20.00 22.211 1 23.62 13.7 5 SIMU20 IV 20.00 24.40 29.82 1 35.4 10.1 5 SIMU24 IV 24.00 24.70 22.81 1 43.6 6.6 5 SIMU24 IV 24.00 28.70 32.81 1 43.6 8.6 5 SIMU26 JC 26.00 21.80 33.2 1 46.6 8.6 5 SIMU26 JG 28.00 31.10 34.7 1 46.4 43.6 5 SIMU30 JK 30.00 33.30 36.81 1 48.4 43.6 5 SIMU30A JA 30.00 44.81 1									
SMA18 IS 18.00 20.00 24.44 1 322 12.4 5 SMA200 IU 20.00 22.21 27.13 1 354 11.1 5 SMA200 IV 20.00 22.20 27.13 1 354 11.3 5 SMA200 IV 20.00 22.20 27.13 1 354 10.3 5 SMA240 IV 20.00 28.00 28.30 1 450.0 83 5 SMA24 IZ 24.00 28.00 31.94 1 42.1 6.5 5 SMA26 JE 28.00 28.30 31.94 1 42.6 6.8 5 5 SMA27 JE 28.00 31.30 30.70 1 64.6 7 5 5 SMA30 JL 33.00 38.70 44.88 1 59.0 6.8 5 SMA30 <tdjl< td=""> 36.00 40.00</tdjl<>								1.001	
SIMU10A IT 18.00 20.00 22.11 1 22.22 13.7 5 SIMU20 IV 20.00 22.23 24.44 1 35.4 11.1 5 SIMU22 IV 22.00 24.40 28.62 1 35.4 10.1 5 SIMU23 IV 22.00 24.40 28.62 1 35.5 11.3 5 SIMU24 IV 24.00 28.90 35.32 1 46.6 6.6 5 SIMU24 JF 28.00 31.10 36.01 1 50.6 6.0 5 SIMU230 JF 28.00 31.10 36.01 1 51.5 7.5 5 SIMU230 JH 30.00 31.30 40.70 1 64.5 62 5 SIMU30 JH 36.00 40.00 44.21 1 76.5 5 SIMU33 JH 36.00 40.00 44.21 1									
SMA20 U 20.00 22.20 27.13 1 35.6 11.1 5 SMA20 W 22.00 22.40 29.82 1 39.4 10.1 5 SMA22 W 22.00 24.40 29.82 1 39.4 10.1 5 SMA24 T 24.00 28.70 30.71 14.05 5 5 SMA24 T 24.00 28.90 39.52 1 46.6 6 5 SMA26 JE 28.00 31.30 31.4 1 42.1 6.5 5 SMA26 JE 28.00 31.30 34.71 1 45.4 8.6 5 SMA230 JE 28.00 31.30 34.71 1 45.4 8.6 5 SMA30 JE 30.00 31.30 34.71 1 45.4 8.6 5 SMA30 JE 30.00 40.00 44.89 1 64.9 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SMA20A N 22.00 24.54 1 32.41 12.3 5 SMA22A N 22.00 24.40 28.87 1 355.5 11.2 5 SMA22A N 22.00 24.40 28.87 1 355.5 11.2 5 SMA24 I 24.00 28.70 22.31 1 43.61 10.3 5 SMA22A JC 24.00 28.70 29.31 1 43.61 10.3 5 SMA23A JC 28.00 31.10 30.01 1 45.01 8.6 5 SMA30 JH 30.00 33.30 40.70 1 45.4 8.8 5 5 SMA33 JL 33.00 38.70 44.88 1 59.0 68.6 5 SMA33 JL 33.00 48.70 44.88 1 58.1 69.2 5 SMA43 JT 43.00 44.00 44.21									
SMA22A N 22.00 24.40 28.97 1 355 11.2 5 SMA24 IZ 24.00 28.70 22.81 1 43.9 10.3 5 SMA24 IZ 24.00 28.70 22.81 1 48.9 10.3 5 SMA26 JE 22.00 28.90 31.94 1 4.21 9.5 5 SMA260 JE 22.00 33.30 30.70 1 46.8 8.8 5 SMA30 JF 30.00 33.30 30.70 1 46.4 8.3 5 SMA33 JL 33.00 38.70 44.88 1 59.0 6.8 5 SMA33 JN 36.00 40.00 44.89 1 64.3 6.2 5 SMA34 JF 43.00 47.80 84.2 1 76.7 5 5 SMA44 JF 46.00 50.00 55.34 1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SMU24 Y 24.00 28.70 32.83 1 43.01 9.3 5 SMU24 Z 22.00 28.70 29.51 1 468 86 5 SMU26 JD 22.00 23.52 1 468 86 5 SMU20 J ² 20.00 31.10 30.17 1 60.4 89 5 SMU20 J ² 20.00 31.10 30.17 1 60.4 89 5 SMU30 J ² 20.00 33.30 98.11 1 64.4 8.3 5 SMU33 JM 33.00 38.70 49.58 1 55.31 7.5 5 SMU33 JM 36.00 44.00 44.21 1 64.7 64.2 5 SMU43 J ² 40.00 47.90 64.2 1 71.1 55 5 SMU43 J ² 40.00 47.90 64.2 1 74.7<	SMAJ22	IW	22.00	24.40	29.82	1	39.4	10.1	5
SIMU2A IZ 24.00 28.70 29.51 1 38.9 10.3 5 SIMU26 JE 26.00 28.90 31.52 1 46.6 86 5 SIMU26A JE 26.00 31.00 31.34 1 42.1 9.5 5 SIMU26A JG 28.00 31.10 34.97 1 45.4 8.8 5 SIMU270 JG 28.00 31.10 34.97 1 45.4 8.8 5 SIMU30A JK 30.00 33.70 44.86 1 59.0 6.8 5 SIMU30A JF 36.00 40.00 44.89 1 64.3 62 5 SIMU30A JF 36.00 40.00 44.80 1 64.3 62 5 SIMU40A JR 40.00 44.40 52.7 1 71.4 55 5 SIMU41A JV 45.00 50.00 65.14		IX	22.00	24.40	26.97	1	35.5	11.2	
SMU220 JD 28.00 28.20 35.32 1 4.68 6.8 5 SMU22A JF 28.00 31.10 38.01 1 45.0 8.0 5 SMU22A JG 28.00 31.10 38.01 1 45.0 8.0 5 SMU30A JH 30.00 33.30 40.70 1 55.5 7.5 5 SMU30A JH 33.00 38.70 44.88 1 55.0 6.8 5 SMU30A JL 33.00 38.70 44.88 1 55.0 6.8 5 SMU30A JP 35.00 40.00 44.21 1 7.6 5 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SIMU22A JE 22.00 31.94 1 42.11 9.5 5 SIMU22A JF 28.00 31.10 34.37 1 45.4 8.8 5 SIMU20A JF 28.00 31.10 34.37 1 45.4 8.8 5 SIMU30 JK 30.00 33.30 38.81 1 45.4 8.8 5 SIMU30A JK 33.00 38.70 44.88 1 53.3 7.5 5 SIMU30A JM 33.00 46.70 40.88 1 83.3 6.2 5 SIMU40A JP 38.00 40.00 44.21 1 88.1 8.3 6.2 5 SIMU43A JF 40.00 44.20 66.42 1 76.5 5 5 SIMU43A JF 40.00 53.00 65.14 1 80.3 42 5 SIMU44A JV 46.00 53.00 66.14									
SMA228 JF 22.00 31.10 38.01 1 55.00 8.0 5 SMA300 JH 30.00 33.30 40.70 1 45.4 8.8 5 SMA30A JL 30.00 33.30 40.70 1 45.8 1 53.5 7.5 5 SMA33A JL 33.00 38.70 44.88 1 53.0 6.8 5 SMA33A JL 33.00 46.70 44.88 1 53.0 6.8 5 SMA34 JP 36.00 40.00 44.49 51.7 1 71.4 5.5 5 SMA40 JC 40.00 44.40 40.77 1 64.5 6.2 5 SMA43A JF 43.00 47.80 88.42 1 76.7 5.5 5 SMA44A JV 45.00 50.00 55.36 1 72.7 5.5 5 SMA44A JV									
SIMU20A JG 22.00 31.10 34.37 1 45.4 8.8 5 SIMU30A JK 30.00 33.30 38.81 1 4.84 6.3 5 SIMU30A JK 30.00 33.30 38.81 1 4.84 6.3 5 SIMU33A JM 33.00 36.70 44.88 1 65.30 7.5 5 SIMU30A JP 38.00 40.00 44.89 1 64.3 6.2 5 SIMU40A JP 38.00 40.00 44.21 1 68.1 6.9 5 SIMU40A JP 43.00 47.80 65.00 1 7.6 5 5 SIMU46A JU 45.00 50.00 55.38 1 7.27 5									
SMU30 JH 90.00 93.30 40.70 1 63.5 7.5 5 SMU30 JL 33.00 93.70 44.88 1 64.4 63.3 5 SMU33 JL 33.00 38.70 44.88 1 69.0 68.8 5 SMU33A JM 38.00 40.00 44.21 1 68.1 69.9 5 SMU40A JP 36.00 40.00 44.42 1 68.1 69.9 5 SMU40A JQ 40.00 44.40 54.27 1 71.4 56 5 SMU43A JS 41.00 47.80 58.42 1 76.7 5.2 5 SMU43A JV 45.00 50.00 56.47 5									
SMA030A JK 30.00 33.30 38.81 1 4.84 8.33 5 SMA033 JM 33.00 38.70 44.88 1 55.30 7.5 5 SMA33A JM 33.00 38.70 44.88 1 64.3 6.2 5 SMAJ3A JP 38.00 44.00 44.21 1 56.1 6.9 5 SMAJ3A JP 38.00 44.00 44.21 1 66.1 6.2 5 SMAJ4A JR 40.00 44.40 49.07 1 64.5 6.2 5 SMAJ43 JT 43.00 47.80 56.42 1 76.7 5 5 SMAJ4A JV 45.00 50.00 55.38 1 77.7 5 5 5 SMAJ43 JX 48.00 53.30 68.14 1 87.4 7 5 SMAJ44 RD 54.00 60.00									
SMA33 JL 33.00 38.70 44.88 1 59.0 68.8 5 SMA33A JM 38.00 40.00 44.89 1 64.3 6.2 5 SMA36A JP 36.00 40.00 44.89 1 64.3 6.2 5 SMA40A JQ 40.00 44.40 54.27 1 71.4 5.6 5 SMA40A JR 40.00 44.40 54.27 1 71.4 5.6 5 SMA40A JR 43.00 47.80 55.28 1 76.7 5.2 5 SMA45A JU 45.00 53.00 65.28 1 76.7 5.5 5 SMA46A JW 46.00 53.30 65.41 1 85.4 7 5 SMA46A JY 51.00 56.70 62.87 1 82.4 4.9 5 SMA54 RD 56.00 64.40 78.1 <									
SMA133A JM 33.00 36.70 40.56 1 53.3 7.5 5 SMA136 JP 36.00 40.00 44.89 1 64.3 62.2 5 SMA136 JP 36.00 44.40 45.27 1 71.4 56.8 5 SMAL40 JR 40.00 44.40 49.07 1 64.5 62.2 5 SMAL43 JS 43.00 47.80 58.42 1 76.7 52.2 5 SMAL43 JT 43.00 47.80 58.42 1 76.7 52 5 SMAL46 JV 45.00 50.00 65.14 1 85.5 47 5 SMAL46A JX 46.00 53.30 68.14 1 82.4 49 5 SMAL5A RE 54.00 60.00 73.33 1 98.3 42.2 5 SMAJ5A RE 56.00 64.40 71.11									
SMA38A JP 38.00 40.00 44.21 1 58.1 89.9 5 SMA40A JR 40.00 44.40 49.07 1 64.5 62.5 5 SMA40A JR 40.00 44.40 49.07 1 64.5 62.5 5 SMA43A JT 43.00 47.80 52.83 1 69.4 5.7 5 SMA43A JT 43.00 47.80 52.83 1 69.4 5.7 5 SMA48A JV 45.00 50.00 61.11 1 80.3 50 5 SMA48A JV 46.00 53.30 65.91 1 77.4 52 5 SMA56A JZ 51.00 56.70 69.30 1 97.1 44.6 5 SMA56A RE 54.00 60.00 73.37 1 97.1 44.6 5 SMA56A RE 54.00 64.40 71.18	SMAJ33A	JM	33.00	36.70	40.56	1	53.3	7.5	
SMA(40) JO 44.00 44.40 54.27 1 71.4 5.6 5 SMA(20) JS 43.00 47.80 69.42 1 76.7 5.2 5 SMA(23) JT 43.00 47.80 52.83 1 69.4 5.7 5 SMA(25) JU 45.00 50.00 61.11 1 69.3 5.0 5 SMA(46) JV 46.00 53.30 66.14 1 85.5 4.7 5 SMA(46) JV 46.00 53.30 66.14 1 85.5 4.7 5 SMA(46) JV 46.00 53.30 68.90 1 77.4 5.2 5 SMA(54) RD 54.00 60.00 73.33 1 96.3 4.2 5 SMA(54) RE 54.00 60.00 73.32 1 80.4 4.3 5 SMA(50) RG 58.00 64.40 71.18<									
SIMALGAN JR 40.00 44.40 49.07 1 64.5 6.2 5 SIMALGA JS 43.00 47.80 52.43 1 78.7 5.2 5 SIMALGA JT 43.00 47.80 52.83 1 69.4 5.7 5 SIMALGA JV 45.00 50.00 61.11 1 80.3 5.0 5 SIMALGA JV 45.00 53.30 65.14 1 80.5 5 5 SIMALGA JX 48.00 53.30 65.11 7.7 5.2 5 SIMALGA JX 48.00 53.30 65.11 7.7 4 5.2 5 SIMALGA JZ 51.00 56.70 69.30 1 97.1 4.4 5 SIMALGA RE 54.00 60.00 73.32 1 97.6 5 SIMALGA RE 54.00 64.40 71.18 103.0 35<									
SMAL43 JS 4300 47.80 58.42 1 76.7 52 5 SMAL43A JT 4300 47.80 52.83 1 684.457 52 5 SMAL45A JU 45.00 50.00 61.11 1 80.3 50 5 SMAL45A JV 45.00 53.30 65.14 1 85.5 4.7 5 SMAL46A JV 40.00 53.30 65.14 1 85.5 4.7 5 SMAL5A JV 40.00 53.30 65.14 1 77.4 52 5 SMAL5A JV 40.00 53.30 62.37 1 82.4 49 5 SMAL5A RD 54.00 60.00 73.33 1 96.3 4.2 5 SMAL5A RE 54.00 66.00 73.72 1 96.3 4.3 5 SMAC6A RL 64.00 71.10 78.59									
SMAL43A JT 4 3 00 4 7.80 5 2.83 1 69.4 5.7 5 SMAL45A JV 4 5 00 50.00 55.28 1 72.7 55 5 SMAL45A JV 4 5 00 50.00 55.28 1 72.7 55 5 SMAL46A JW 4 0.00 53.30 65.14 1 85.5 4.7 5 SMAL45A JZ 51.00 56.70 69.207 1 91.1 4.4 5 SMAL5A RE 54.00 60.00 73.33 1 98.3 4.2 5 SMAL5A RE 54.00 66.00 73.73 1 103.0 3.9 5 SMAL5A RG 56.00 64.40 78.71 1 103.0 3.9 5 SMAL6A RE 56.00 64.40 78.71 1 103.0 3.9 5 SMAL6A RL 60.00 77.70 75<									
SIMUAS5 JU 45.00 50.00 61.11 1 80.3 5.0 5 SIMUASA JW 48.00 53.30 95.14 1 95.5 5 SIMUASA JX 48.00 53.30 98.91 1 77.4 5.2 5 SIMUASA JX 48.00 53.30 98.91 1 97.4 5.2 5 SIMUASA JX 48.00 53.30 98.91 1 97.4 4.4 5 SIMUASA RE 51.00 56.70 62.87 1 82.4 4.9 5 SIMUASA RE 54.00 60.00 68.32 1 87.1 4.8 5 SIMUASA RG 58.00 64.40 71.16 1 93.6 4.3 5 SIMUASA RG 60.00 66.70 73.72 1 96.8 4.1 5 SIMUASA RM 60.00 71.10 78.59 1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SMAL45A JV 45.00 50.00 55.28 1 72.7 5.5 5 SMAL48A JX 48.00 53.30 651.44 1 85.5 4.7 5 SMAL48A JX 48.00 53.30 651.44 1 87.5 5 SMAL51A JZ 51.00 56.70 62.87 1 82.4 4.9 5 SMAL54 RE 54.00 60.00 73.33 1 96.3 4.2 5 SMAL54 RE 54.00 60.00 76.33 1 103.0 3.9 5 SMAL54 RE 58.00 64.40 78.71 1 103.0 3.9 5 SMA264 RH 60.00 66.70 81.52 1 107.0 3.7 5 SMA264 RL 64.00 71.10 78.59 1 103.0 3.9 5 SMA70 RN 70.00 77.80 95.09 1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SMA/48 JW 44.00 53.30 65.14 1 85.5 4.7 5 SMA/48A JX 44.00 53.30 68.91 1 77.4 5.2 5 SMA/51A JY 51.00 56.70 69.30 1 91.1 4.4 5 SMA/54 RD 56.00 60.00 73.33 1 86.3 4.2 5 SMA/54 RE 56.00 64.40 78.71 1 103.0 3.9 5 SMA/58A RG 56.00 64.40 78.71 1 103.0 3.9 5 SMA/60A RK 60.00 68.70 73.72 1 96.8 4.1 5 SMA/60A RK 64.00 71.10 78.80 1 103.0 3.9 5 SMA/70A RH 70.00 77.80 85.99 1 113.0 3.5 5 SMA/75A RR 75.00 83.30 92.07									
SNAL8A JX 44.00 53.30 58.91 1 77.4 52.2 5 SNAL51 JY 51.00 56.70 69.30 1 82.4 4.9 5 SNAL51 JZ 51.00 56.70 62.87 1 82.4 4.9 5 SNAL54 RE 54.00 60.00 73.33 1 96.3 4.2 5 SNAL54 RE 56.00 64.40 78.71 1 103.0 3.9 5 SNAUS6A RG 58.00 64.40 77.18 1 93.6 4.3 5 SMAU60 RH 60.00 66.70 73.72 1 94.8 4.1 5 SMAU84 RL 64.00 71.10 78.58 1 103.0 3.5 5 SMAU70 RN 70.00 77.80 95.09 1 125.0 3.2 5 SMAU75 RQ 75.00 83.30 92.07									
SMAISIA JZ 5100 56.70 62.87 1 82.4 4.9 5 SMAJS4 RE 54.00 60.00 73.33 1 96.3 4.22 5 SMAJS4 RE 54.00 60.00 68.32 1 87.1 4.6 5 SMAJSA RG 58.00 64.40 78.71 1 103.0 3.9 5 SMAJSA RG 58.00 64.40 71.16 1 93.6 4.3 5 SMAJ60 RH 60.00 68.70 81.52 1 107.0 3.7 5 SMAJ64 RL 64.00 71.10 88.90 1 114.0 3.5 5 SMAJ70 RN 70.00 77.80 95.99 1 113.0 3.5 5 SMAJ75 RQ 75.00 83.30 101.81 1 113.0 3.5 5 SMAJ75 RQ 75.00 83.30 92.07 <td></td> <td>JX</td> <td>48.00</td> <td></td> <td>58.91</td> <td>1</td> <td>77.4</td> <td>5.2</td> <td>5</td>		JX	48.00		58.91	1	77.4	5.2	5
SMUS4 RD 54:00 60:00 73:33 1 96:3 4.2 5 SMUS4A RE 54:00 60:00 73:33 1 96:3 4.2 5 SMUS4A RE 54:00 60:00 78:71 1 103:0 39 5 SMUS6A RG 58:00 64:40 78:71 1 107:0 3.7 5 SMUS6A RH 60:00 68:70 81:52 1 107:0 3.7 5 SMU364 RL 64:00 71:10 78:59 1 103:0 3.9 5 SMU70A RM 64:00 71:10 78:59 1 103:0 3.9 5 SMU70A RP 70:00 77:80 85:99 1 113:0 3.5 5 SMU75A RQ 75:00 83:30 92:07 1 121:0 3.3 5 SMU78A RT 76:00 86:70 95:83									
SMAJSAA RE 54.00 60.00 66.32 1 87.1 4.66 5 SMAJSA RG 58.00 64.40 78.71 1 103.0 3.9 5 SMAJSA RG 58.00 64.40 71.18 1 103.0 3.9 5 SMAJSA RG 68.00 68.70 81.52 1 107.0 3.7 5 SMAJGA RK 60.00 68.70 81.52 1 107.0 3.7 5 SMAJGA RK 64.00 71.10 88.90 1 114.0 3.5 5 SMAJ70 RN 70.00 77.80 95.99 1 113.0 3.5 5 SMAJ7A RP 75.00 83.30 101.81 1 114.0 3.0 5 SMAJ7A RR 78.00 88.70 105.97 1 139.0 2.9 5 SMAJ7A RT 78.00 88.70 105.									
SMAIS8 RF 58.00 64.40 78.71 1 103.0 3.9 5 SMAIS8A RG 58.00 64.40 71.18 1 93.8 43.3 5 SMAIS0A RH 60.00 66.70 73.72 1 107.0 3.7 5 SMAIGAA RK 60.00 66.70 73.72 1 96.8 4.1 5 SMAIGAA RK 60.00 77.10 78.50 1 103.0 3.9 5 SMAI70 RN 70.00 77.80 95.99 1 1125.0 3.2 5 SMAJ75 RQ 75.00 83.30 101.81 1 134.0 3.0 5 SMAJ75 RQ 75.00 83.30 92.07 1 121.0 3.3 5 SMAJ78 RT 78.00 88.70 95.83 1 126.0 2.2 5 SMAJ78 RV 85.00 94.40 10									
SMU/88A RG 5800 64.40 71.18 1 93.8 4.3 5 SMU/80 RH 60.00 68.70 81.52 1 107.0 3.7 5 SMU/80A RK 60.00 68.70 73.72 1 96.8 4.1 5 SMU/84A RL 64.00 71.10 78.89 1 103.0 3.9 5 SMU/70 RN 70.00 77.80 95.99 1 113.0 3.5 5 SMU/70 RN 70.00 77.80 95.99 1 113.0 3.5 5 SMU/75 RQ 75.00 83.30 10181 1 134.0 3.0 5 SMU/78 RS 78.00 88.70 105.97 1 139.0 2.9 5 SMU/78 RV 85.00 94.40 116.38 1 151.0 2.6 5 SMU/85A RV 80.00 100.00 110									
SMU80 RH 60.00 68.70 81.52 1 107.0 3.7 5 SMU80A RK 60.00 68.70 73.72 1 96.8 4.1 5 SMU80A RK 60.00 71.10 28.90 1 114.0 3.5 5 SMU70A RM 70.00 77.30 95.09 1 125.0 3.2 5 SMU70A RP 70.00 77.30 95.09 1 113.0 3.5 5 SMU70A RP 70.00 77.30 85.99 1 113.0 3.5 5 SMU75A RQ 75.00 83.30 92.07 1 121.0 3.3 5 SMU75A RS 78.00 88.70 105.97 1 139.0 2.2 5 SMU36A RV 85.00 94.40 105.33 1 126.0 2.2 5 SMU30A RX 90.00 100.00 110.03									
SMUBBA RK 60.00 68.70 73.72 1 96.8 4.1 5 SMUB4A RL 64.00 71.10 78.50 1 103.0 3.9 5 SMU70 RN 70.00 77.80 95.99 1 125.0 3.2 5 SMU70 RN 70.00 77.80 95.99 1 113.0 3.5 5 SMU75 RQ 75.00 83.30 101.81 1 134.0 3.0 5 SMU75A RR 75.00 83.30 92.07 1 121.0 3.3 5 SMU75A RS 78.00 86.70 105.97 1 139.0 2.9 5 SMU78A RT 78.00 86.70 105.97 1 139.0 2.9 5 SMU378A RV 85.00 94.40 116.38 1 151.0 2.2 5 SMU30A RV 90.00 100.00 110.5									
SMUBR RL 64.00 71.10 98.90 1 114.0 3.5 5 SMAURA RM 64.00 71.10 78.58 1 103.0 3.9 5 SMAU70 RN 70.00 77.80 95.09 1 125.0 3.2 5 SMAU70A RP 70.00 77.80 95.09 1 113.0 3.5 5 SMAU75A RP 75.00 83.30 92.07 1 121.0 3.3 5 SMAU75A RR 75.00 83.30 92.07 1 121.0 3.3 5 SMAU75A RR 75.00 88.70 105.97 1 139.0 2.9 5 SMAU85A RV 85.00 94.40 116.38 1 126.0 2.2 5 SMAU80 RX 90.00 100.00 110.53 1 146.0 2.7 5 SMAU80 RY 90.00 100.00 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
SMUBRA RM 64.00 71.10 78.58 1 103.0 3.9 5 SMA/70 RN 70.00 77.80 95.09 1 125.0 3.2 5 SMA/70A RP 70.00 77.80 95.09 1 113.0 3.5 5 SMA/75A RQ 75.00 83.30 101.81 1 134.0 3.0 5 SMA/75A RR 75.00 83.30 92.07 1 121.0 3.3 5 SMA/75A RR 75.00 88.70 105.97 1 139.0 2.9 5 SMA/75A RT 78.00 88.70 105.97 1 139.0 2.9 5 SMA/75A RV 90.00 100.00 112.22 1 160.0 2.6 5 SMA/85 RU 85.00 94.40 116.34 1 177.0 2.9 5 SMA/90A RX 90.00 100.00									
SMU70A RP 70.00 77.80 85.99 1 113.0 3.5 5 SMA/75 RQ 75.00 83.30 101.81 1 134.0 3.0 5 SMA/75 RR 75.00 83.30 92.07 1 121.0 3.3 5 SMA/78 RS 78.00 88.70 105.97 1 139.0 2.9 5 SMA/78A RT 78.00 88.70 105.97 1 139.0 2.9 5 SMA/78A RT 78.00 98.70 115.38 1 126.0 2.2 5 SMA/78A RV 85.00 94.40 104.34 1 137.0 2.9 5 SMA/80A RV 90.00 100.00 1122.22 1 160.0 2.5 5 SMA/10A RY 90.00 111.00 135.87 1 179.0 2.2 5 SMA/10A RZ 100.00 122.00	SMAJ64A	RM	64.00	71.10	78.58		103.0	3.9	5
SMU/75 RQ 75:00 83.30 10181 1 134.0 3.0 5 SMU/75 RR 75:00 83.30 92:07 1 121.0 3.3 5 SMU/76 RS 78:00 88:70 105:97 1 139.0 2.9 5 SMU/78 RS 78:00 88:70 95.83 1 126.0 2.2 5 SMU/85 RU 85:00 94.40 115.38 1 151.0 2.6 5 SMU/85A RV 85:00 94.40 104.34 1 177.0 2.9 5 SMU/80A RV 90:00 100:00 122.22 1 168:0 2.7 5 SMU/100 RY 100:00 110.03 124.88 1 177.0 2.3 5 SMU/110 SD 110:00 122.00 134.84 1 177.0 2.3 5 SMU/110 SD 110:00 122.00									
SMU75A RR 75.00 83.30 92.07 1 121.0 3.3 5 SMU78 RS 78.00 88.70 105.97 1 139.0 2.2 5 SMU78A RT 78.00 88.70 105.97 1 139.0 2.2 5 SMU78A RT 78.00 86.70 95.83 1 126.0 2.2 5 SMU85A RV 85.00 94.40 104.34 1 137.0 2.9 5 SMU30A RV 90.00 100.00 112.22 1 160.0 2.5 5 SMU30A RX 90.00 100.00 110.53 1 146.0 2.7 5 SMU100 RY 100.00 111.00 135.67 1 179.0 2.2 5 SMU100 RZ 100.00 112.00 149.11 1 196.0 2.0 5 SMU110 SD 110.00 122.00									
SMU/78 RS 78.00 88.70 105.97 1 139.0 2.9 5 SMU/78A RT 78.00 88.70 95.83 1 128.0 2.2 5 SMA/85 RU 85.00 94.40 115.38 1 128.0 2.2 5 SMA/85 RV 85.00 94.40 115.38 1 137.0 2.9 5 SMA/86A RV 85.00 94.40 104.34 1 137.0 2.9 5 SMA/90A RX 90.00 100.00 1122.22 1 166.0 2.7 5 SMA/100 RY 90.00 111.00 135.67 1 179.0 2.2 5 SMA/110 SD 110.00 122.00 149.11 1 198.0 2.0 5 SMA/110 SF 120.00 133.00 142.56 1 214.0 1.9 5 SMA/130 SH 130.00 144.00<						1			5
SMU/37AA RT 78.00 96.70 95.83 1 126.00 2.2 5 SMU/85 RU 85.00 94.40 115.38 1 151.0 2.8 5 SMU/85 RV 95.00 94.40 116.38 1 151.0 2.8 5 SMU/85A RV 90.00 100.00 122.22 1 160.0 2.5 5 SMU/80A RX 90.00 100.00 110.53 1 146.0 2.7 5 SMU/10A RY 100.00 111.00 135.67 1 179.0 2.2 5 SMU/10A RZ 100.00 111.00 135.67 1 179.0 2.2 5 SMU/110 SD 110.00 122.00 149.11 1 196.0 2.0 5 SMU/120 SF 120.00 133.00 142.58 1 214.0 19 5 SMU/120 SH 130.00 14						1			5
SMAI85 RU 85.00 94.40 115.38 1 151.0 2.6 5 SMAI85A RV 85.00 94.40 104.34 1 137.0 2.9 5 SMAI85A RV 95.00 100.00 122.22 1 160.0 2.5 5 SMAI90A RX 90.00 100.00 112.22 1 160.0 2.5 5 SMAI00A RX 90.00 111.00 135.87 1 179.0 2.2 5 SMAI10A RZ 100.00 112.00 149.11 1 198.0 2.0 5 SMAI10A SE 110.00 122.00 149.11 1 198.0 2.0 5 SMAI10A SE 110.00 122.00 149.11 1 198.0 2.0 5 SMAI12A SF 120.00 133.00 142.56 1 21.0 1.7 5 SMAI130 SH 130.00 1									
SMU-1035A RV 85.00 94.40 104.34 1 137.0 2.9 5 SMAJ80 RW 90.00 100.00 122.22 1 160.0 2.5 5 SMAJ80A RX 90.00 100.00 110.53 1 146.0 2.7 5 SMAJ10A RY 100.00 111.00 135.67 1 179.0 2.2 5 SMAJ10A RZ 100.00 111.00 122.68 1 162.0 2.5 5 SMAJ10A SE 110.00 122.00 144.911 1 196.0 2.0 5 SMAJ10A SE 120.00 133.00 162.56 1 214.0 19 5 SMAJ12D SF 120.00 133.00 147.00 1 193.0 2.0 5 SMAJ13D SH 130.00 144.00 176.00 1 231.0 1.7 5 SMAJ13D SH 130.00									
SMU300 RV 90.00 100.00 122.22 1 160.0 2.5 5 SMAJB0A RX 90.00 100.00 112.22 1 160.0 2.5 5 SMAJB0A RX 90.00 100.00 110.53 1 146.0 2.7 5 SMAJ100 RY 100.00 111.00 135.67 1 179.0 2.2 5 SMAJ100 RZ 100.00 111.00 132.68 1 162.0 2.5 5 SMAJ10 SD 110.00 122.00 149.11 1 198.0 2.0 5 SMAJ10 SF 120.00 133.00 147.00 1 193.0 2.0 5 SMAJ130 SH 130.00 144.00 178.00 1 29.0 1.9 5 SMAJ130 SH 130.00 144.00 199.16 1 29.0 1.5 5 SMAJ150 SL 150.00									
SMAJBOA RX 90.00 100.00 110.53 1 146.0 2.7 5 SMAJ100 RY 100.00 111.00 135.67 1 179.0 2.2 5 SMAJ100A RZ 100.00 111.00 122.68 1 182.0 2.5 5 SMAJ101 SD 110.00 122.00 144.911 1 196.0 2.0 5 SMAJ101 SD 110.00 122.00 134.84 1 177.0 2.3 5 SMAJ120 SF 120.00 133.00 142.56 1 214.0 1.9 5 SMAJ130 SF 120.00 133.00 147.00 1 193.0 2.0 5 SMAJ130 SH 130.00 144.00 176.00 1 29.0 1.7 5 SMAJ130A SK 130.00 147.00 11 29.0 1.5 5 SMAJ160A SK 130.00 147.00	SMAJ90								
SMU/100A RZ 100.00 111.00 122.88 1 162.0 2.5 5 SMAJ110 SD 110.00 122.00 149.11 1 198.0 2.0 5 SMAJ110A SE 110.00 122.00 134.84 1 177.0 2.3 5 SMAJ120 SF 120.00 133.00 142.56 1 214.0 1.9 5 SMAJ120 SG 120.00 133.00 147.00 1 193.0 2.0 5 SMAJ130 SH 130.00 144.00 176.00 1 23.0 1.5 5 SMAJ130 SH 130.00 144.00 178.00 1.99.0 1.9 5 SMAJ130 SL 150.00 167.00 204.11 1 289.0 1.5 5 SMAJ160 SN 190.00 178.00 217.56 1 247.0 1.4 5 SMAJ160A SP 160.00 178.00 </td <td></td> <td>RX</td> <td>90.00</td> <td>100.00</td> <td>110.53</td> <td>1</td> <td>146.0</td> <td>2.7</td> <td>5</td>		RX	90.00	100.00	110.53	1	146.0	2.7	5
SMU110 SD 110.00 122.00 149.11 1 196.0 2.0 5 SMU110A SE 110.00 122.00 134.84 1 177.0 2.3 5 SMU110A SE 120.00 133.00 162.56 1 214.0 1.9 5 SMU120A SG 120.00 133.00 162.56 1 214.0 1.9 5 SMU120A SG 120.00 133.00 147.00 1 193.0 2.0 5 SMU130A SH 130.00 144.00 176.00 1 231.0 1.7 5 SMU150A SL 150.00 167.00 204.11 1 299.0 1.5 5 SMU150A SM 150.00 167.00 124.58 1 243.0 1.6 5 SMU160 SN 190.00 178.00 127.56 1 287.0 1.4 5 SMU170A SQ 170.00									
SMAJ110A SE 110.00 122.00 134.84 1 177.0 2.3 5 SMAJ120 SF 120.00 133.00 142.56 1 214.0 1.9 5 SMAJ120 SG 120.00 133.00 142.56 1 214.0 1.9 5 SMAJ120 SG 120.00 133.00 147.00 1 193.0 2.0 5 SMAJ130 SH 130.00 144.00 176.00 1 291.0 1.7 5 SMAJ150 SL 150.00 167.00 204.11 1 299.0 1.5 5 SMAJ150 SL 150.00 167.00 204.11 1 289.0 1.6 5 SMAJ160 SN 190.00 178.00 217.56 1 243.0 1.6 5 SMAJ160A SP 160.00 178.00 198.74 1 259.0 1.5 5 SMAJ170A SR 170.00					122.68				
SMU/120 SF 120.00 133.00 142.56 1 214.0 1.9 5 SMU/120 SG 120.00 133.00 147.00 1 193.0 2.0 5 SMU/130 SH 130.00 144.00 176.00 1 231.0 1.7 5 SMU/130 SK 130.00 144.00 199.16 1 209.0 1.9 5 SMU/150 SL 150.00 147.00 204.11 1 269.0 1.5 5 SMU/150A SM 150.00 187.00 217.56 1 243.0 1.6 5 SMU/160 SN 190.00 178.00 217.56 1 247.0 1.4 5 SMU/160A SP 180.00 178.00 231.00 1.6 5 SMU/170A SQ 170.00 189.00 231.00 1 304.0 1.3 5 SMU/170A SR 170.00 189.00 208.89									
SMU120A SG 120.00 133.00 147.00 1 193.0 2.0 5 SMA130 SH 130.00 144.00 176.00 1 231.0 1.7 5 SMA130A SK 130.00 144.00 159.16 1 209.0 1.9 5 SMA130A SK 130.00 144.00 159.16 1 209.0 1.9 5 SMA150A SK 150.00 167.00 204.11 1 289.0 1.5 5 SMA150A SM 150.00 167.00 204.11 1 289.0 1.6 5 SMA160 SN 190.00 176.00 217.56 1 287.0 1.4 5 SMA160A SP 190.00 178.00 198.74 1 259.0 1.5 5 SMA170A SR 170.00 189.00 231.00 1 304.0 1.3 5									
SMU130 SH 130.00 144.00 176.00 1 221.0 1.7 5 SMU130A SK 130.00 144.00 159.16 1 209.0 1.9 5 SMU150 SL 150.00 167.00 204.11 1 289.0 1.9 5 SMU150A SM 150.00 167.00 204.11 1 289.0 1.5 5 SMU160A SM 150.00 177.00 144.58 1 243.0 1.6 5 SMU160A SN 180.00 178.00 217.56 1 227.0 1.4 5 SMU170A SP 160.00 178.00 198.74 1 299.0 1.5 5 SMU170A SR 170.00 189.00 231.00 1 304.0 1.3 5 SMU170A SR 170.00 189.00 208.89 1 275.0 1.4 5									
SMAU130A SK 130.00 144.00 159.16 1 209.0 1.9 5 SMAU150 SL 150.00 187.00 204.11 1 269.0 1.5 5 SMAU150A SM 150.00 187.00 204.11 1 243.0 1.6 5 SMAU160 SN 160.00 178.00 217.56 1 287.0 1.4 5 SMAU160A SP 160.00 178.00 217.56 1 289.0 1.5 5 SMAU170 SQ 170.00 199.74 1 259.0 1.5 5 SMAU170 SQ 170.00 189.00 231.00 1 304.0 1.3 5 SMAU170A SR 170.00 189.00 208.89 1 275.0 1.4 5									
SMU170 SL 150.00 167.00 204.11 1 289.00 1.5 5 SMA150A SM 150.00 167.00 184.58 1 243.0 1.6 5 SMA1100 SN 180.00 178.00 217.56 1 287.0 1.4 5 SMA110A SP 180.00 178.00 198.74 1 259.0 1.5 5 SMA110A SP 180.00 178.00 198.74 1 259.0 1.5 5 SMA1170A SQ 170.00 189.00 231.00 1 304.0 1.3 5 SMA170A SR 170.00 189.00 208.89 1 275.0 1.4 5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
SMAU150A SM 150.00 167.00 184.58 1 243.0 1.6 5 SMAU160 SN 180.00 178.00 217.56 1 287.0 1.4 5 SMAU160A SP 160.00 178.00 198.74 1 259.0 1.5 5 SMAU170 SQ 170.00 199.00 231.00 1 304.0 1.3 5 SMAU170A SR 170.00 189.00 208.89 1 275.0 1.4 5									
SMU1700 SN 160.00 178.00 217.56 1 287.0 1.4 5 SMA160A SP 180.00 178.00 196.74 1 259.0 1.5 5 SMA170 SQ 170.00 189.00 231.00 1 304.0 1.3 5 SMA170A SR 170.00 189.00 208.89 1 275.0 1.4 5									5
SMAU170 SQ 170.00 189.00 231.00 1 304.0 1.3 5 SMAU170A SR 170.00 189.00 208.89 1 275.0 1.4 5	SMAJ160	SN	160.00	178.00	217.56		287.0	1.4	5
SMAJ170A SR 170.00 189.00 208.89 1 275.0 1.4 5									
					208.89	1	275.0	1.4	5

"C" Suffix Designates Bi-directional Devices "A" Suffix Designates 5% Tolerance Devices No Suffix Designates 10% Tolerance Devices

• China - Germany - Korea - Singapore - United States •

• http://www.smc-diodes.com - sales@ smc-diodes.com •



SMAJ SERIES 400W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Green Products

Technical Data Data Sheet N0223, Rev. -

BI-DIRECTIONAL 400 WATT SURFACE MOUNT TVS

DI-DIREC	HUNAL 4	JU WATT	SURFACE	MOONT	172			
		REVERSE	BREAKDOWN	BREAKDOWN		MAXIMUM		REVERSE
BEDIRECTIONAL	DEVICE MARKING	STAND-OFF VOLTAGE	VOLTAGE VBR (V) MIN.	VOLTAGE VBR (V) MAX	CURRENT	CLAMPING VOLTAGE @lpp	PEAK PULSE CURRENT	@VRWM IR
PART NO.	CODE	VRWM (V)	@IT	@IT	IT (mA)	Vol IAGE @ipp Vc (V)	lpp (A)	(uA)
SMAJ5.0C	TD	5.00	6.40	7.82	10	9.6	41.6	1600
SMAJ5.0CA	TE	5.00	6.40	7.07	10	9.2	43.5	1600
SMAJ6.0C SMAJ6.0CA	TF TG	6.00 6.00	6.67 6.67	8.15 7.37	10 10	11.4 10.3	35.1 38.8	1600 1600
SMAJ6.5C	TH	6.50	7.22	8.82	10	12.3	32.5	1000
SMAJ6.5CA	тк	6.50	7.22	7.98	10	11.2	35.7	1000
SMAJ7.0C SMAJ7.0CA	TL TM	7.00 7.00	7.78	9.51 8.60	10 10	13.3 12.0	30.1 33.3	400 400
SMAJ7.5C	TN	7.50	8.33	10.18	1	14.3	28.0	200
SMAJ7.5CA	TP	7.50	8.33	9.21	1	12.9	31.0	200
SMAJ8.0C SMAJ8.0CA	TQ TR	8.00 8.00	8.99 8.99	10.99 9.94	1	15.0 13.6	26.5 29.4	100 100
SMAJ8.5C	TS	8.50	9.44	11.54	1	15.9	25.4	20
SMAJ8.5CA	Π	8.50	9.44	10.43	1	14.4	27.7	20
SMAJ9.0C SMAJ9.0CA	TU TV	9.00 9.00	10.00	12.22 11.05	1	16.9 15.4	23.6 26.0	10 10
SMAJ10C	TW	10.00	11.10	13.57	1	18.8	21.2	5
SMAJ10CA	TX	10.00	11.10	12.27	1	17.0	23.5	5
SMAJ11C SMAJ11CA	TY TZ	11.00 11.00	12.20 12.20	14.91 13.48	1	20.1 18.2	20.0 22.0	5
SMAJ12C	UD	12.00	13.30	16.26	1	22.0	18.1	5
SMAJ12CA	UE	12.00	13.30	14.70	1	19.9	20.1	5
SMAJ13C SMAJ13CA	UF UG	13.00 13.00	14.40 14.40	17.00 15.92	1	23.8 21.5	16.8 18.6	5
SMAJ14C	ÜH	14.00	15.00	19.07	1	25.8	15.5	5
SMAJ14CA	UK	14.00	15.00	17.24	1	23.2	17.2	5
SMAJ15C SMAJ15CA	ULUM	15.00 15.00	16.70 16.70	20.41 18.46	1	26.9 24.4	14.8 16.4	5
SMAJ16C	UN	16.00	17.80	21.76	1	28.8	13.8	5
SMAJ16CA SMAJ17C	UP UQ	16.00 17.00	17.80 18.90	19.67 23.10	1	26.0 30.5	15.3 13.1	5
SMAJ17CA	UR	17.00	18.90	20.89	1	27.6	14.5	5
SMAJ18C	US	18.00	20.00	24.44	1	32.2	12.4	5
SMAJ18CA SMAJ20C	UT	18.00 20.00	20.00 22.20	22.11 27.13	1	29.2 35.8	13.7 11.1	5 5
SMAJ20CA	UV	20.00	22.20	24.54	1	32.4	12.3	5
SMAJ22C	UW	22.00	24.40	29.82	1	39.4	10.1	5
SMAJ22CA SMAJ24C	UX UY	22.00 24.00	24.40 26.70	26.97 32.63	1	35.5 43.0	11.2 9.3	5
SMAJ24CA	UZ	24.00	26.70	29.51	1	38.9	10.3	5
SMAJ26C	VD	26.00	28.90	35.32	1	46.6	8.6	5
SMAJ26CA SMAJ28C	VE VF	26.00 28.00	28.90 31.10	31.94 38.01	1	42.1 50.0	9.5 8.0	5
SMAJ28CA	VG	28.00	31.10	34.37	1	45.4	8.8	5
SMAJ30C	VH VK	30.00	33.30	40.70	1	53.5 48.4	7.5 8.3	5
SMAJ30CA SMAJ33C	VL.	30.00 33.00	33.30 36.70	36.81 44.96	1	40.4 59.0	6.8	5 5
SMAJ33CA	VM	33.00	36.70	40.56	1	53.3	7.5	5
SMAJ36C SMAJ36CA	VN VP	36.00 36.00	40.00	48.89 44.21	1	64.3 58.1	6.2 6.9	5
SMAJ40C	vç	40.00	44.40	54.27	1	71.4	5.6	5
SMAJ40CA	VR	40.00	44.40	49.07	1	64.5	6.2	5
SMAJ43C SMAJ43CA	VS VT	43.00 43.00	47.80 47.80	58.42 52.83	1	76.7 69.4	5.2 5.7	5
SMAJ45C	vu	45.00	50.00	61.11	1	80.3	5.0	5
SMAJ45CA	w	45.00	50.00	55.26	1	72.7	5.5	5
SMAJ48C SMAJ48CA	ww vx	48.00 48.00	53.30 53.30	65.14 58.91	1	85.5 77.4	4.7 5.2	5 5
SMAJ51C	VY	51.00	56.70	69.30	1	91.1	4.4	5
SMAJ51CA	VZ	51.00	56.70	62.67	1	82.4	4.9	5
SMAJ54C SMAJ54CA	WD WE	54.00 54.00	00.00 00.00	73.33 66.32	1	96.3 87.1	4.2 4.6	5 5
SMAJ58C	WF	58.00	64.40	78.71	1	103.0	3.9	5
SMAJ58CA SMAJ60C	WG WH	58.00 60.00	64.40 66.70	71.18 81.52	1	93.6 107.0	4.3 3.7	5
SMAJ60C	WH	60.00	66.70	81.52	1	107.0	3.7	5
SMAJ64C	WL	64.00	71.10	86.90	1	114.0	3.5	5
SMAJ64CA SMAJ70C	WM	64.00 70.00	71.10	78.58	1	103.0 125.0	3.9	5
SMAJ70CA	WP	70.00	77.80	85.99	1	125.0	3.5	5
SMAJ75C	WQ	75.00	83.30	101.81	1	134.0	3.0	5
SMAJ75CA SMAJ78C	WR WS	75.00 78.00	83.30 86.70	92.07 105.97	1	121.0 139.0	3.3 2.9	5
SMAJ78CA	WT	78.00	86.70	95.83	1	128.0	2.9	5
SMAJ85C	WU	85.00	94.40	115.38	1	151.0	2.6	5
SMAJ85CA SMAJ90C	WV WW	85.00 90.00	94.40	104.34	1	137.0	2.9	5
SMAJ90CA	WX	90.00	100.00	110.53	1	146.0	2.7	5
SMAJ100C	WY WZ	100.00	111.00	135.67	1	179.0	2.2	5 5
SMAJ100CA SMAJ110C	WZ XD	100.00	111.00 122.00	122.68 149.11	1	162.0 198.0	2.5	5
SMAJ110CA	XE	110.00	122.00	134.84	1	177.0	2.3	5
SMAJ120C SMAJ120CA	XF XG	120.00 120.00	133.00 133.00	162.56 147.00	1	214.0 193.0	1.9	5 5
SMAJ120CA SMAJ130C	XH	130.00	144.00	147.00	1	231.0	1.7	5
SMAJ130CA	ХК	130.00	144.00	159.16	1	209.0	1.9	5
SMAJ150C SMAJ150CA	XL XM	150.00 150.00	167.00 167.00	204.11 184.58	1	269.0 243.0	1.5 1.6	5
SMAJ160C	XN	160.00	178.00	217.56	1	287.0	1.4	5
SMAJ160CA SMA 1170C	XP	160.00	178.00	196.74	1	259.0	1.5	5
SMAJ170C SMAJ170CA	XQ XR	170.00 170.00	189.00	231.00 208.89	1	304.0 275.0	1.3 1.4	5 5
"C" Suffix	Decignation F							

"C" Suffix Designates Bi-directional Devices "A" Suffix Designates 5% Tolerance Devices No Suffix Designates 10% Tolerance Devices

China - Germany - Korea - Singapore - United States

• http://www.smc-diodes.com - sales@ smc-diodes.com •



400W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Technical Data Data Sheet N0223, Rev. -

Green Products

DISCLAIMER:

1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).

2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.

3- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC - Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.

. 4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.

5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.