

**Micro Commercial Components** 



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# ER2A-L **THRU ER2J-L**

# Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF" Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Built-in strain relief
- Super fast switching speed under 35ns
- Marking: Cathode band and type number (No '-L' Suffix)

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

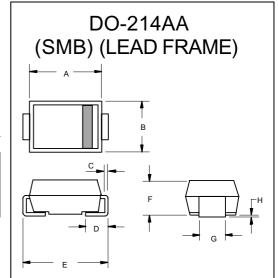
| MCC<br>Part Number | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Maximum<br>RMS Voltage | Maximum DC<br>Blocking<br>Voltage |
|--------------------|---|------------------------|-----------------------------------|
| ER2A-L             | 50V   | 35V                    | 50V                               |
| ER2B-L             | 100V  | 70V                    | 100V                              |
| ER2D-L             | 200V  | 140V                   | 200V                              |
| ER2G-L             | 400V  | 280V                   | 400V                              |
| ER2J-L             | 600V  | 420V                   | 600V                              |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

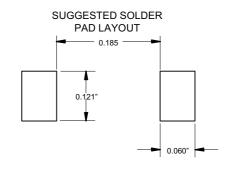
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|---------------------------|------------------|-----------|------------------------------|
| Average Forward           | $I_{F(AV)}$      | 2.0A      | T <sub>L</sub> = 110°C       |
| Current                   | ` ,              |           |                              |
| Peak Forward Surge        | I <sub>FSM</sub> | 50A       | 8.3ms, half sine             |
| Current                   |                  |           |                              |
| Maximum                   |                  |           |                              |
| Instantaneous             |                  |           |                              |
| Forward Voltage           |                  |           |                              |
| ER2A-L-ER2D-L             | $V_{F}$          | .95V      | $I_{FM} = 2.0A;$             |
| ER2G-L                    |                  | 1.25V     |                              |
| ER2J-L                    |                  | 1.70V     |                              |
| Maximum DC                |                  |           |                              |
| Reverse Current At        | $I_R$            | 5μΑ       | T <sub>A</sub> = 25°C        |
| Rated DC Blocking         |                  | 1mA       | T <sub>A</sub> = 100°C       |
| Voltage                   |                  |           |                              |
| Maximum Reverse           | T <sub>rr</sub>  | 35ns      | $I_F=0.5A, I_R=1.0A,$        |
| Recovery Time             |                  |           | I <sub>rr</sub> =0.25A       |
| Typical Junction          | C <sub>J</sub>   | 15pF      | Measured at                  |
| Capacitance               |                  |           | 1.0MHz, V <sub>R</sub> =4.0V |

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

# 2 Amp Super Fast **Recovery Rectifier** 50 to 600 Volts



| DIMENSIONS |        |      |      |       |      |  |
|------------|--------|------|------|-------|------|--|
|            | INCHES |      | MM   |       |      |  |
| DIM        | MIN    | MAX  | MIN  | MAX   | NOTE |  |
| Α          | .160   | .185 | 4.06 | 4.70  |      |  |
| В          | .130   | .155 | 3.30 | 3.94  |      |  |
| С          | .006   | .012 | 0.15 | 0.31  |      |  |
| D          | .030   | .060 | 0.76 | 1.52  |      |  |
| E          | .200   | .220 | 5.08 | 5.59  |      |  |
| F          | .079   | .096 | 2.00 | 2.44  |      |  |
| G          | .075   | .087 | 1.91 | 2.21  |      |  |
| Н          | .002   | .008 | 0.05 | 0.203 |      |  |

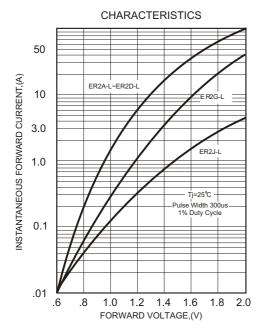


# ER2A-L thru ER2J-L



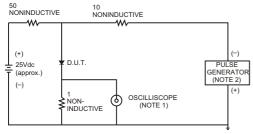
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FIG.1-TYPICAL FORWARD



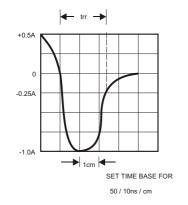
## FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE

#### RECOVERY TIME CHARACTERISTICS

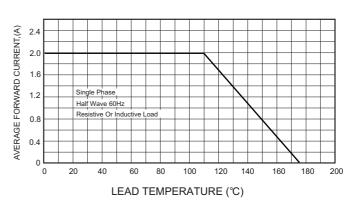


NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

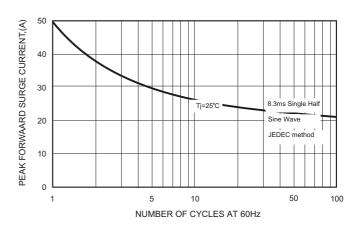
2. Rise Time= 10ns max., Source Impedance= 50 ohms



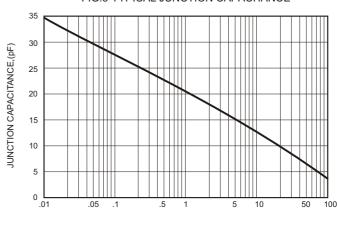
#### FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



### FIG.5-TYPICAL JUNCTION CAPACITANCE





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### Ordering Information:

| Device             | Packing               |  |
|--------------------|-----------------------|--|
| ER2A-LTP~ ER2J-LTP | Tape&Reel: 3Kpcs/Reel |  |

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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