NOT RECOMMENDED FOR NEW DESIGNS
USE ER1A-LTP~ER1J-LTP SERIES

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Features
• Easy Pick And Place
• High Temp Soldering: 260°C for 10 Seconds At Terminals
• Ultrafast Recovery Times For High Efficiency
• Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates 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

Maximum Ratings
• Operating Temperature(Tj): -50°C to +150°C
• Storage Temperature(Tstg): -50°C to +150°C
• Maximum Thermal Resistance; 15°C/W Junction To Lead

<table>
<thead>
<tr>
<th>MCC Catalog Number</th>
<th>Device Marking</th>
<th>Maximum Recurrent Peak Reverse Voltage</th>
<th>Maximum RMS Voltage</th>
<th>Maximum DC Blocking Voltage</th>
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</thead>
<tbody>
<tr>
<td>ER1A</td>
<td>ER1A</td>
<td>50V</td>
<td>35V</td>
<td>50V</td>
</tr>
<tr>
<td>ER1B</td>
<td>ER1B</td>
<td>100V</td>
<td>70V</td>
<td>100V</td>
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<tr>
<td>ER1C</td>
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<td>150V</td>
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<td>140V</td>
<td>200V</td>
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<tr>
<td>ER1G</td>
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<td>400V</td>
<td>280V</td>
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<td>600V</td>
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<td>ER1K</td>
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<td>800V</td>
<td>560V</td>
<td>800V</td>
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<tr>
<td>ER1M</td>
<td>ER1M</td>
<td>1000V</td>
<td>700V</td>
<td>1000V</td>
</tr>
</tbody>
</table>

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current

Peak Forward Surge Current

Maximum Instantaneous Forward Voltage

Maximum DC Reverse Current At Rated DC Blocking Voltage

Maximum Reverse Recovery Time

Typical Junction Capacitance

*Pulse test: Pulse width 200µsec, Duty cycle 2%

ER1A thru ER1M

**Figure 1**
Typical Forward Characteristics

**Figure 2**
Forward Derating Curve

**Figure 3**
Junction Capacitance

- **Instantaneous Forward Current - Ampere**
- **Instantaneous Forward Voltage - Volts**

- **Average Forward Rectified Current - Ampere**
- **Ambient Temperature - °C**

- **Junction Capacitance - pF**
- **Reverse Voltage - Volts**
ER1A thru ER1M

Figure 5
New SMB Assembly
Round Lead Process

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram

Notes:
1. Rise Time = 7ns max.
   Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
   Source impedance = 50 ohms
3. Resistors are non-inductive
Ordering Information:

<table>
<thead>
<tr>
<th>Device</th>
<th>Packing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number-TP</td>
<td>Tape&amp;Reel: 3Kpcs/Reel</td>
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</table>

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

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