



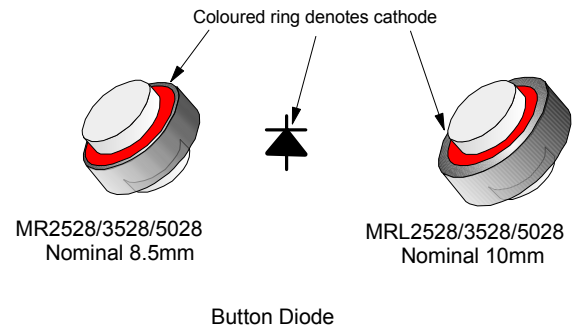
**Transys  
Electronics  
LIMITED**

**MR2528/MRL2528 - 25 Amp  
MR3528/MRL3528 - 35 Amp  
MR5028/MRL5028 - 50 Amp**  
**Rectifier/Zener Automotive Alternator Diode**

## Data Sheet

### Features

- \* Epi Layer for tight control of parameters
- \* Silicon oxide passivation for superior junction protection
- \* Visual to Mil Std 750C
- \* 100 % Tested
- \* Low Reverse Leakage
- \* Low Forward Voltage
- \* Load Dump Capability



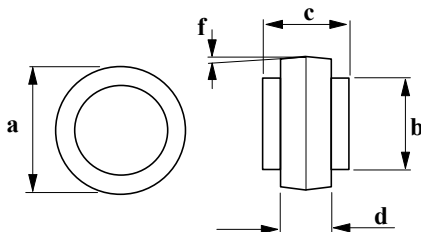
| Characteristics at 25° C<br>(Unless stated otherwise) | Maximum Forward Voltage                      | Reverse Breakdown Voltage | Maximum Reverse Leakage | Maximum Clamping Voltage                                | Maximum Forward Current @ Ta = 150° C | Non Repetitive Peak Forward Surge Current             |
|---|--|---------------------------|-------------------------|---|---------------------------------------|---|
| Type Number   | V <sub>F</sub><br>Volt                       | V <sub>BR</sub><br>Volt   | I <sub>R</sub><br>nA    | V <sub>CL</sub><br>Volt                                 | I <sub>F (AVG)</sub><br>Amp           | I <sub>FSM</sub><br>Amp                               |
| MR2528<br>MRL2528                                     | 1.05<br>@ 75A t = 300µ S<br>< 2% Duty Cycle  | 24 - 32<br>@ 100mA        | 200<br>@ VR =20 Volt    | < 34<br>@ IR = 2.8 x IF avg<br>80 µS<br>< 2% duty Cycle | 25                                    | 400<br>@ 8.3mS single<br>half wave.<br>(Jedec Method) |
| MR3528<br>MRL3528                                     | 1.05<br>@ 100A t = 300µ S<br>< 2% Duty Cycle | 24 - 32<br>@ 100mA        | 200<br>@ VR =20 Volt    | < 34<br>@ IR = 2.8 x IF avg<br>80 µS<br>< 2% duty Cycle | 35                                    | 600<br>@ 8.3mS single<br>half wave.<br>(Jedec Method) |
| MR5028<br>MRL5028                                     | 1.05<br>@ 100A t = 300µ S<br>< 2% Duty Cycle | 24 - 32<br>@ 100mA        | 200<br>@ VR =20 Volt    | < 34<br>@ IR = 2.8 x IF avg<br>80 µS<br>< 2% duty Cycle | 50                                    | 800<br>@ 8.3mS single<br>half wave.<br>(Jedec Method) |

Power cycle requirement.

1. 10,000 cycles
2. I<sub>F</sub> = 200% Rated current
3. Temperature rise 150° C
4. Excursion rate 37.8° C /Minute, +/- 5° C /Minute

Maximum Operating Temperature Range -65 to + 200° C  
Maximum Storage Temperature Range -65 to + 200° C

## Mechanical Dimensions



| Dimensions - MR2528/3528/5028 |            |       |             |       |
|-------------------------------|------------|-------|-------------|-------|
| Dim                           | Inches     |       | Millimetres |       |
|                               | Min        | Max   | Min         | Max   |
| a                             | 0.326      | 0.350 | 8.30        | 8.90  |
| b                             | 0.216      | 0.224 | 5.50        | 5.701 |
| c                             | 0.236      | 0.251 | 6.00        | 6.40  |
| d                             | 0.165      | 0.185 | 4.20        | 4.70  |
| f                             | 5° Nominal |       | 5° Nominal  |       |

| Dimensions - MRL2528/3528/5028 |            |       |             |       |
|--------------------------------|------------|-------|-------------|-------|
| Dim                            | Inches     |       | Millimetres |       |
|                                | Min        | Max   | Min         | Max   |
| a                              | 0.370      | 0.409 | 9.70        | 10.40 |
| b                              | 0.216      | 0.224 | 5.50        | 5.701 |
| c                              | 0.236      | 0.251 | 6.00        | 6.40  |
| d                              | 0.165      | 0.185 | 4.20        | 4.70  |
| f                              | 5° Nominal |       | 5° Nominal  |       |

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