

TECHNICAL DATA  
DATA SHEET 4041, REV. -

**HERMETIC POWER SCHOTTKY RECTIFIER**  
**200°C Maximum Operation Temperature**  
SINGLE / DUAL COMMON CATHODE, COMMON ANODE, DOUBLER

**DESCRIPTION:** A 100 VOLT, 30 AMP POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

**MAXIMUM RATINGS**

ALL RATINGS ARE AT  $T_C = 25^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

| RATING   | SYMBOL          | MAX.           | UNITS              |
|--|-----------------|----------------|--------------------|
| PEAK INVERSE VOLTAGE   | PIV             | 100            | Volts              |
| MAXIMUM DC OUTPUT CURRENT ( $T_C = 100^\circ\text{C}$ )<br>(SINGLE / DOUBLER)              | $I_o$           | 15             | Amps               |
| MAXIMUM DC OUTPUT CURRENT ( $T_C = 100^\circ\text{C}$ )<br>(COMMON CATHODE / COMMON ANODE) | $I_o$           | 30             | Amps               |
| MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT ( $t=8.3\text{ms}$ ,<br>Sine) (per leg)       | $I_{FSM}$       | 150            | Amps               |
| JUNCTION CAPACITANCE $V_R = 5\text{Vdc}$ (per leg)   | $C_T$           | 500            | pF                 |
| MAXIMUM THERMAL RESISTANCE (SINGLE)  | $R_{\theta JC}$ | 1.45           | $^\circ\text{C/W}$ |
| MAXIMUM THERMAL RESISTANCE   | $R_{\theta JC}$ | 0.72           | $^\circ\text{C/W}$ |
| MAXIMUM OPERATING TEMPERATURE RANGE  | $T_{op/stg}$    | -65 to<br>+200 | $^\circ\text{C}$   |

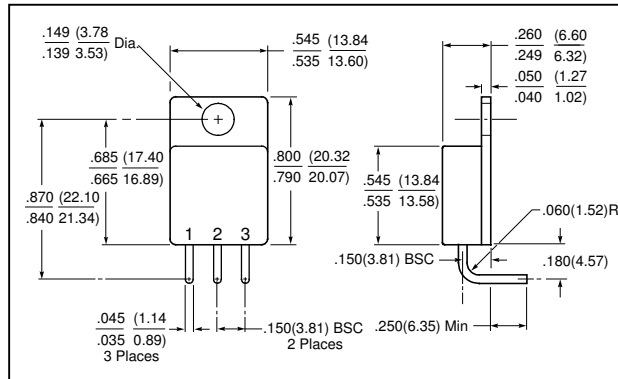
**ELECTRICAL CHARACTERISTICS**

| CHARACTERISTIC   | SYMBOL | MAX.         | UNITS |
|--|--------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP ( $I_F = 15\text{A}$ ) (per leg)<br>$T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$ | $V_f$  | 0.93<br>0.77 | Volts |
| MAXIMUM REVERSE CURRENT ( $I_r @ \text{PIV}$ ) (per leg)<br>$T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$      | $I_r$  | 0.35<br>8.0  | mA    |

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**MECHANICAL DIMENSIONS: In Inches / mm**

**TO-254**

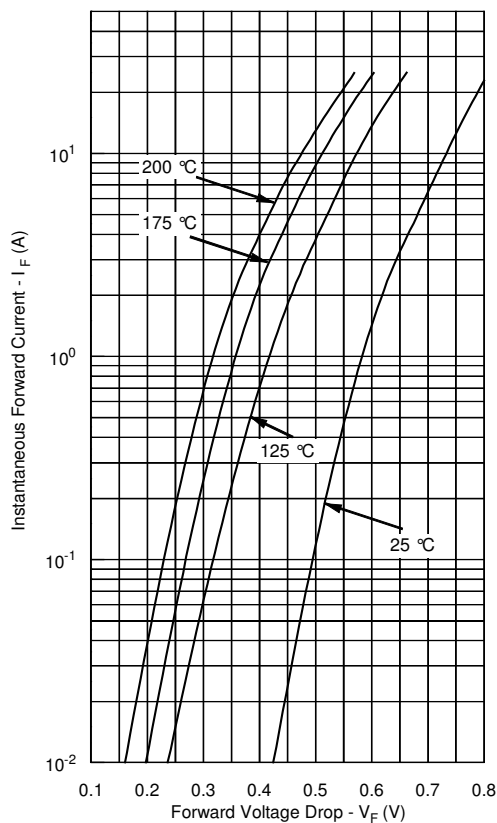


**PINOUT TABLE**

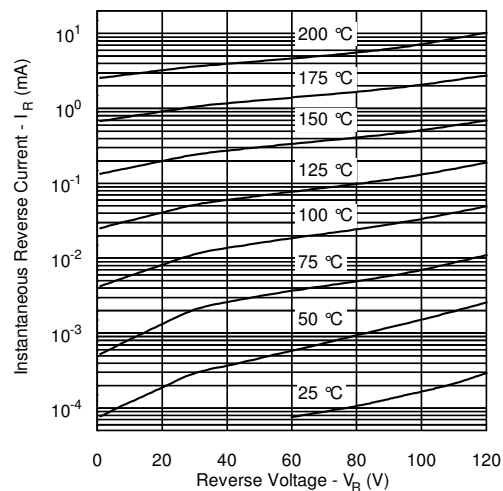
| TYPE                               | PIN 1     | PIN 2          | PIN 3     |
|------------------------------------|-----------|----------------|-----------|
| SINGLE RECTIFIER                   | CATHODE   | ANODE          | ANODE     |
| DUAL RECTIFIER, COMMON CATHODE (P) | ANODE 1   | COMMON CATHODE | ANODE 2   |
| DUAL RECTIFIER, COMMON ANODE (N)   | CATHODE 1 | COMMON ANODE   | CATHODE 2 |
| DOUBLER (D)                        | ANODE     | ANODE/CATHODE  | CATHODE   |

Vf curves shown are for die only.

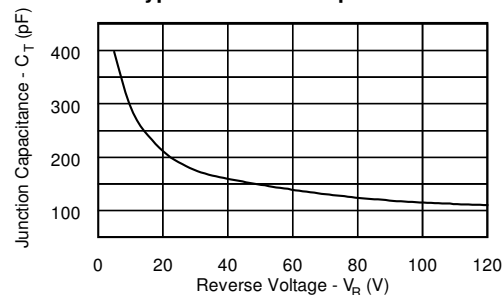
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**TECHNICAL DATA**

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