TECHNICAL DATA DATASHEET 4735, REV. -

# HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

**DESCRIPTION:** A 200-VOLT, 35 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

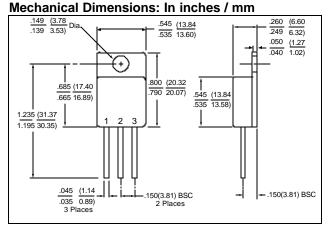
**MAXIMUM RATINGS** ALL RATINGS ARE @  $T_C$  = 25 °C UNLESS OTHERWISE SPECIFIED. RATING SYMBOL MAX. UNITS PEAK INVERSE VOLTAGE PIV 200 Volts MAXIMUM DC OUTPUT CURRENT (@ T<sub>c</sub>=100 <sup>O</sup>C) (Single, Doubler) 35 Amps Ь MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine) Amps I<sub>FSM</sub> 150 MAXIMUM JUNCTION CAPACITANCE  $(V_r = 5V)$ Ст 900 pF MAXIMUM THERMAL RESISTANCE (Single)  $R_{\theta JC}$ 0.60 °C/W MAXIMUM OPERATING TEMPERATURE RANGE Top/Tstg -65 to °C +200MAXIMUM STORAGE TEMPERATURE RANGE Top/Tstg -65 to °C + 200

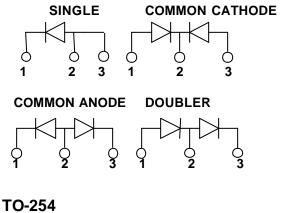
### **ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 35 Amps)			
T <sub>J</sub> = 25 °C	V <sub>f</sub>	1.10	Volts
T <sub>J</sub> = 125 °C		0.95	
MAXIMUM REVERSE CURRENT (Ir @ 200 V PIV)			
T <sub>J</sub> = 25 °C	l <sub>r</sub>	1.1	mA
T <sub>J</sub> = 125 °C		24	

## SENSITRON

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#### **PINOUT TABLE**

FINUUT TABLE				
ТҮРЕ	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	CATHODE 1 COMMON ANODE		
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE	
Curves shown are for bare die only.				
Typical Forward Characteristics	Typical Reverse Characteristics		istics	
10 <sup>2</sup>		200 °C		
	L L	175 °C		
		150 °C		
200 °C		125 °C		
10 <sup>1</sup>	vs 10⁻1	100 °C		
	nstantaneous Reverse Current - k (mÅ)			
	N 10 <sup>-2</sup> <b></b>	75 °C		
10 <sup>0</sup> Untrent - F (V)	Itan			
	10 <sup>-3</sup>	50 °C		
		25 °C		
	10 <sup>-4</sup>			
	0	40 80 120 160 20	0 240	
		Reverse Voltage - <sub>R</sub> V(V)		
	_	Typical Junction Capacitance		
	L 800		<b></b>	
10 <sup>1</sup>	J			
	Unnction Capacitance - 9, (pF)			
	400 aba			
$10^2$ 0.0 0.2 0.4 0.6 0.8		40 80 120 160 20	0 240	
O.0         O.2         O.4         O.0         O.8         O         O         40         80         120         160         240           Forward Voltage Drop - ½(V)         Reverse Voltage - <sub>R</sub> V(V)         Reverse - <sub>R</sub> V(V)				
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#### **TECHNICAL DATA**

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