

TECHNICAL DATA DATASHEET 4739, REV. -

HERMETIC POWER SCHOTTKY RECTIFIER 175°C Maximum Operation Temperature

DESCRIPTION: A 45-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	45	Volts
MAXIMUM DC OUTPUT CURRENT (@ T _C =100 ^O C) (Single, Doubler)	lo	35	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)		150	Amps
MAXIMUM JUNCTION CAPACITANCE (V _r =5V)	C _T	4800	pF
MAXIMUM THERMAL RESISTANCE (Single)	$R_{ hetaJC}$	0.33	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE		-65 to + 175	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	°C

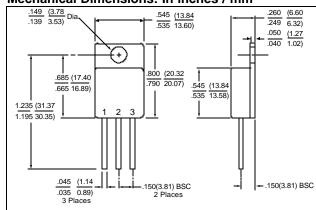
ELECTRICAL CHARACTERISTICS

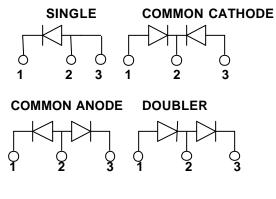
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I _f = 35 Amps)			
T _J = 25 °C	V_{f}	0.73	Volts
T _J = 125 °C		0.62	
MAXIMUM REVERSE CURRENT (I _r @ 45 V PIV)			
T _J = 25 °C	I _r	2.4	mA
T _J = 125 °C		90	

SENSITRON

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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	
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE	
Curves shown are for bare die only.				
Typical Forward Characteristics	Typical Reverse Characteristics			
	10 ³	175 °C		
	E 10 ²	150 °C		
175 °C	Instantaneous Reverse Current - k (mA)	125 °C		
€ 10 ²	- 88 10 ⁰	100 °C		
Ten	ous Re	75 °C		
no ge	antanec	50 °C		
J. J	- ¹³ 10 ²	25 °C		
(v) Lantaneous Forward Current -pl (v) 125 °C		10 20 30 40	50	
lustant lustan		Reverse Voltage - ½ (V) Typical Junction Capacitano	 :e	
25 °C	<u>£</u> 5000			
	7 4000 1000			
101				
	- Sa 2000			
0.2 0.3 0.4 0.5 0.6 0.7 Forward Voltage Drop - ½ (V)	0.8 ¬¬ 0	10 20 30 40 Reverse Voltage - ½ (V)	50	
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