

**TECHNICAL DATA** DATA SHEET 4713, REV. -

# HERMETIC POWER SCHOTTKY RECTIFIER 150°C Maximum Operation Temperature

DESCRIPTION: A 45-VOLT, 7.5/15 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 <sub>C</sub> =100 <sup>O</sup> C) (Single, Doubler)	Io	7.5	Amps
MAXIMUM DC OUTPUT CURRENT (@ T <sub>C</sub> =100 <sup>O</sup> C) (Common Cathode, Common Anode)	lo	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I <sub>FSM</sub>	140	Amps
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V)	C <sub>T</sub>	400	pF
MAXIMUM THERMAL RESISTANCE	$R_{ heta JC}$	1.36	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	Top/Tstg	-65 to + 150	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	°C

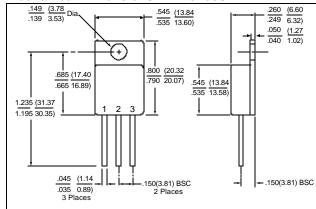
### **ELECTRICAL CHARACTERISTICS**

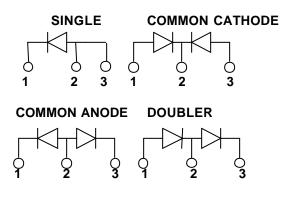
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 7.5 Amps)			
T <sub>J</sub> = 25 °C	$V_{f}$	0.65	Volts
T <sub>J</sub> = 125 °C		0.60	
MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 45 V PIV)			
T <sub>J</sub> = 25 °C	l <sub>r</sub>	0.75	mA
T <sub>J</sub> = 125 °C		35	

# **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 <sup>1</sup> 150 °C  150 °C  125 °C  25 °C	Instantaneous Reverse Current - 1 m (mA)  103  0  104	150 °C  125 °C  100 °C  75 °C  50 °C  25 °C  10 20 30 40  Reverse Voltage - ½(V)	50	
101	(jd) 400 U 350	Typical Junction Capacitance		
102	Gabacitanus 250 Logo 250 Logo 150 Logo			
0.0 0.2 0.4 0.6 (Forward Voltage Drop - \( \frac{1}{2} \) (V)	0.8	10 20 30 40 Reverse Voltage - ½(V)	50	
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#### **TECHNICAL DATA**

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