

**TECHNICAL DATA** DATA SHEET 4705, REV. -

# HERMETIC POWER SCHOTTKY RECTIFIER 150°C Maximum Operation Temperature

DESCRIPTION: A 30-VOLT, 3/6 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	30	Volts
MAXIMUM DC OUTPUT CURRENT (@ T <sub>C</sub> =100 <sup>O</sup> C) (Single, Doubler)	Io	3	Amps
MAXIMUM DC OUTPUT CURRENT (@ T <sub>C</sub> =100 <sup>O</sup> C) (Common Cathode, Common Anode)	lo	6	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I <sub>FSM</sub>	55	Amps
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V)	C <sub>T</sub>	220	pF
MAXIMUM THERMAL RESISTANCE	$R_{ heta JC}$	3.17	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE		-65 to + 150	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	°C

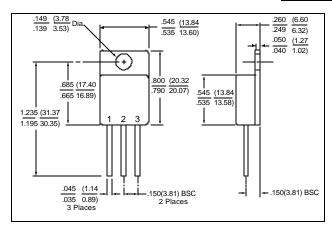
#### **ELECTRICAL CHARACTERISTICS**

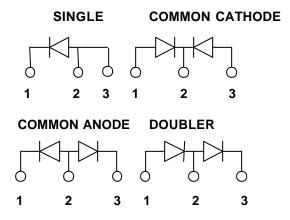
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 3 Amps)			
T <sub>J</sub> = 25 °C	$V_{f}$	0.59	Volts
T <sub>J</sub> = 125 °C		0.49	
MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 30 V PIV)			
T <sub>J</sub> = 25 °C	I <sub>r</sub>	0.4	mA
T <sub>J</sub> = 125 °C		20	

### **SENSITRON**

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# Mechanical Dimensions: In inches / mm TO-254





### **PINOUT TABLE**

I MOOT 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, COMMON ANODE (N)  DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE 2		
	ANODE	CATHODE/ ANODE	CATHODE		
Curves shown are for bare die only.					
Typical Forward Characteristics	Typical Reverse Characteristics				
	10 <sup>2</sup>				
		150 °C			
	(g 10 <sup>1</sup>				
150 °C	) a	125 °C			
	Instantaneous Reverse Current - I <sub>R</sub> (mA)				
	<u>a</u> 100 €	100 °C			
	) b	75 °C			
(v) 10 <sup>0</sup> Loward Current - 10 <sup>1</sup> Loward - 10 <sup>1</sup> Loward Current - 10 <sup>1</sup> Loward - 10 <sup>1</sup> Loward Current - 10 <sup>1</sup> Loward - 10 <sup></sup>	₩ 10 <sup>-1</sup>	75 °C			
	B Re				
<b>E 1 1 1 1</b>	eoni	50 °C			
j j j j j j j j j j j j j j j j j j j	ugt 10 <sup>-2</sup>				
	lstar l	25 °C			
g 125 °C	10-3				
	0	10 20 30	40		
in the state of th		Reverse Voltage - ½ (V)			
25 °C	Typical Junction Capacitance				
	<u>ق</u> 190 —				
	170				
	96 170	-			
		<del>\                                    </del>			
	aba				
	ပ္ပိ 130				
10-2	190   170				
10 10 20 30 40			40		
רסושמוט Voltage ריסיים - אָ (V)	Forward Voltage Drop - ¼ (V)  Reverse Voltage - ¼ (V)				

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