

TECHNICAL DATA  
DATA SHEET 6123, REV. -

## HERMETIC POWER SCHOTTKY RECTIFIER 175°C Maximum Operation Temperature

**DESCRIPTION:** A 250-VOLT, 7.5/15 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-257 PACKAGE.

### MAXIMUM RATINGS

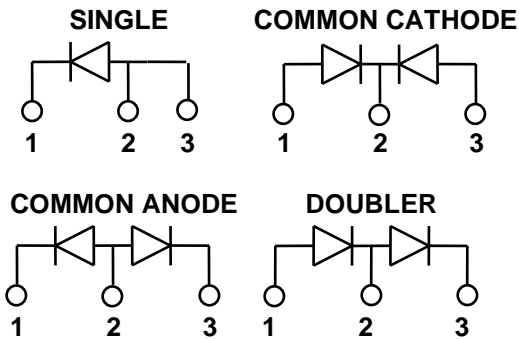
ALL RATINGS ARE @  $T_C = 25^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	250	Volts
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100^\circ\text{C}$ ) (Single, Doubler)	$I_o$	7.5	Amps
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100^\circ\text{C}$ ) (Common Cathode, Common Anode)	$I_o$	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=8.3\text{ms}$ , Sine) per leg	$I_{FSM}$	75	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=10\text{V}$ )	$C_T$	100	pF
MAXIMUM THERMAL RESISTANCE (per leg)	$R_{\theta JC}$	5.37	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

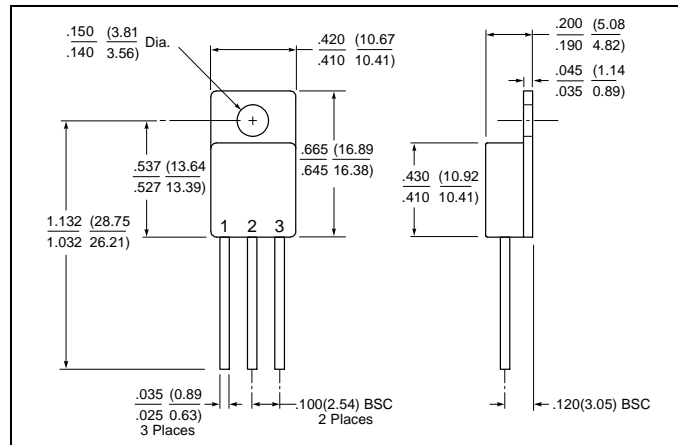
### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 7.5$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.98 0.83	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 250 V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	0.2 1.0	mA

**SENSITRON**  
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**Mechanical Dimensions: In inches / mm**



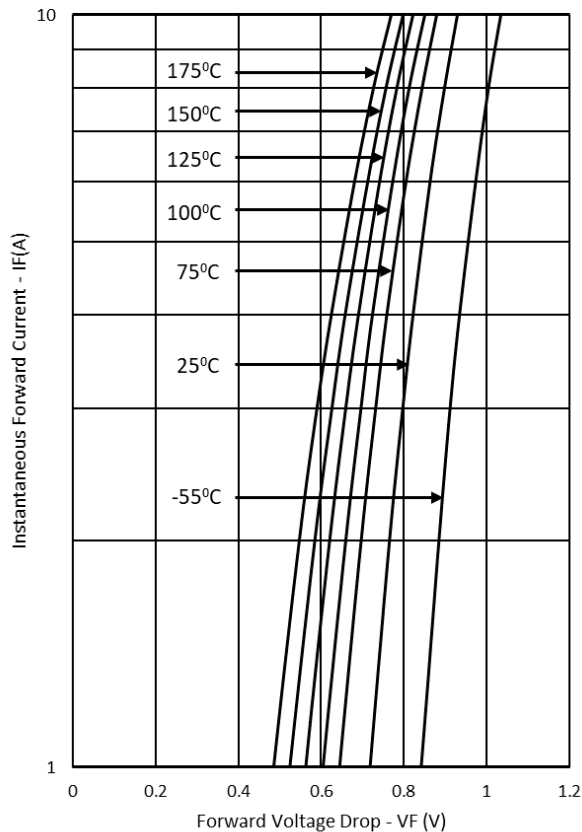
**TO-257**

**PINOUT TABLE**

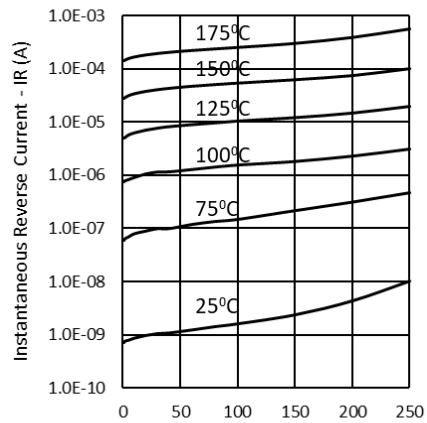
TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE

Curves shown are for bare die only.

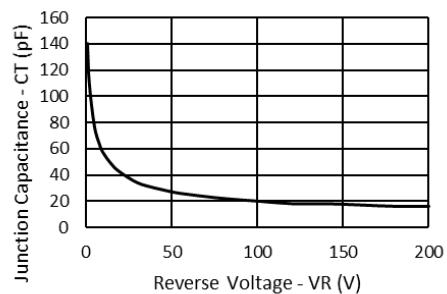
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**SENSITRON**  
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**PART ORDERING INFORMATION:**

**SHD**X**1261F9**X XX X

C=Ceramic Seals

Pinout (see table)

**Screening Level (blank is no screening):**

Suffix	Screened in Accordance with:
blank	No screening level
S	MIL-PRF-19500, TXV Level
SS	MIL-PRF-19500, S Level

**QCI (blank is no QCI):**

Suffix	Inspection in Accordance with:
blank	No QCI
Q	MIL-PRF-19500 QCI

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