

TECHNICAL DATA
DATA SHEET 872, REV. A

HERMETIC POWER SCHOTTKY RECTIFIER

Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

MAXIMUM RATINGS

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 100^\circ\text{C}$) (Single / Doubler)	I_o	15	Amps
MAXIMUM DC OUTPUT CURRENT ($T_C = 100^\circ\text{C}$) (Common Cathode / Common Anode)	I_o	16	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3$ msec. (PER LEG)	I_{FSM}	75	Amps
MAXIMUM THERMAL RESISTANCE (PER LEG) (Single) (Common Cathode / Common Anode/Doubler)	$R_{\theta JC}$	1.45 0.72	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	T_{op}, T_{stg}	-65 to +175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

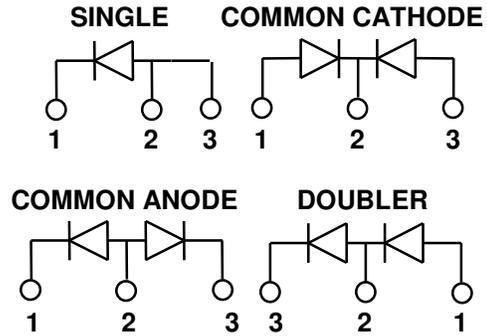
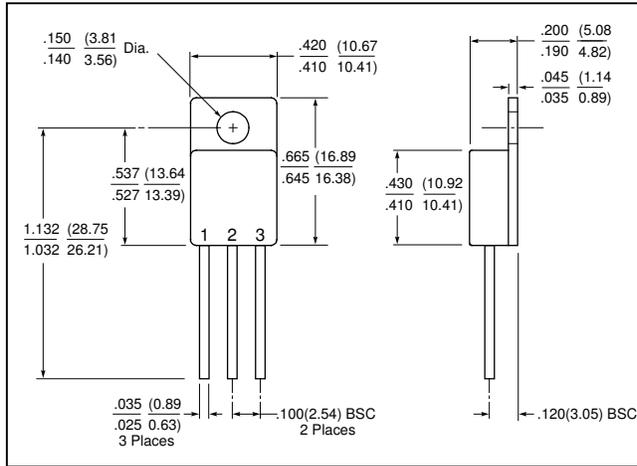
CHARACTERISTICS	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) ($I_f = 15$ Amps) $I_F = 15\text{A}, T_A = 25^\circ\text{C}$ $I_F = 15\text{A}, T_A = 125^\circ\text{C}$	V_f	0.73 0.66	Volts
MAXIMUM REVERSE CURRENT I_r @ PIV (PER LEG)	I_r	0.4 15	mA mA
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}, f = 1\text{mHz}$ $V_{SIG} = 50\text{mV}$ (p-p) (Max) (PER LEG)	C_J	800	pF

(Curves are for bare die only. SD125SB45A)

SENSITRON

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Mechanical Dimensions: In Inches / mm

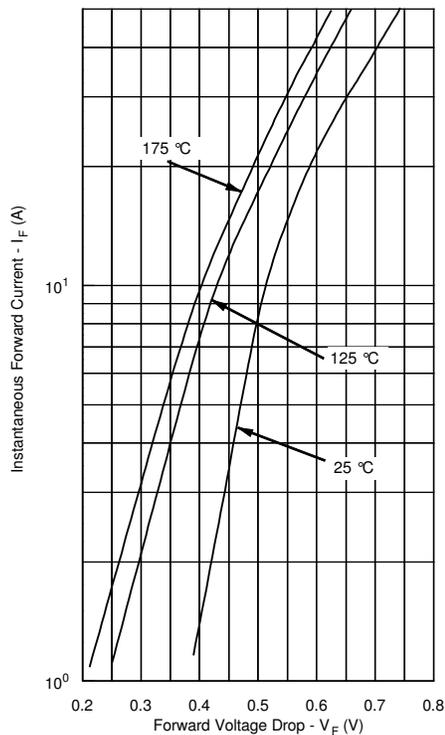


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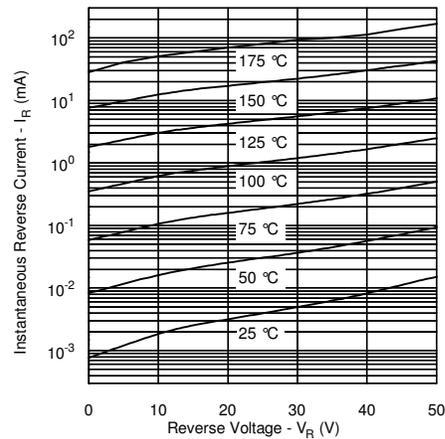
PINOUT TABLE

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	ANODE/CATHODE	CATHODE

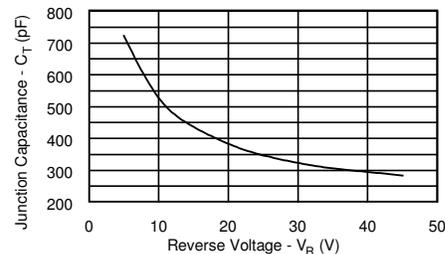
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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