

TECHNICAL DATA
DATA SHEET 1159, REV. A

HERMETIC POWER SCHOTTKY RECTIFIER
200°C Maximum Operation Temperature

DESCRIPTION: A 100 VOLT, 30/45 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-258 PACKAGE.

MAXIMUM RATINGS

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

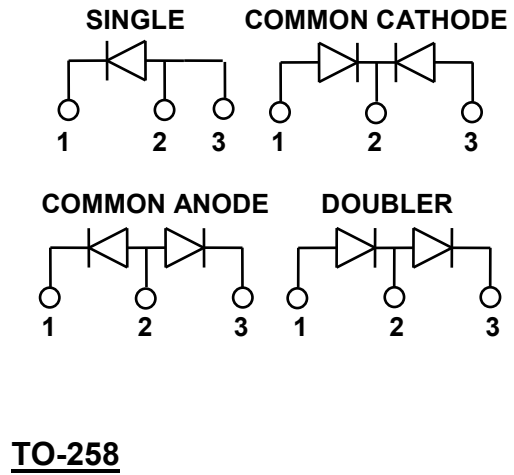
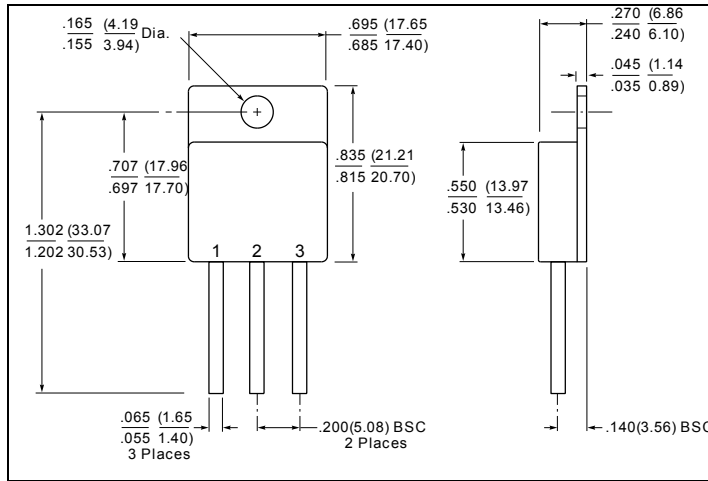
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100^\circ\text{C}$) (Single, Doubler)	I_O	30	Amps
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100^\circ\text{C}$) (Common Cathode, Common Anode)	I_O	45	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine)	I_{FSM}	200	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$)	C_T	1000	pF
MAXIMUM THERMAL RESISTANCE (Single)	$R_{\theta JC}$	1.5	$^\circ\text{C/W}$
MAXIMUM THERMAL RESISTANCE (Common Cathode, Common Anode, Doubler)	$R_{\theta JC}$	0.39	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	Top/Tstg	-65 to + 200	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 30$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	1.01 0.85	Volts
MAXIMUM REVERSE CURRENT (I_r @ 100 V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	0.75 15	mA

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Mechanical Dimensions: In inches / mm



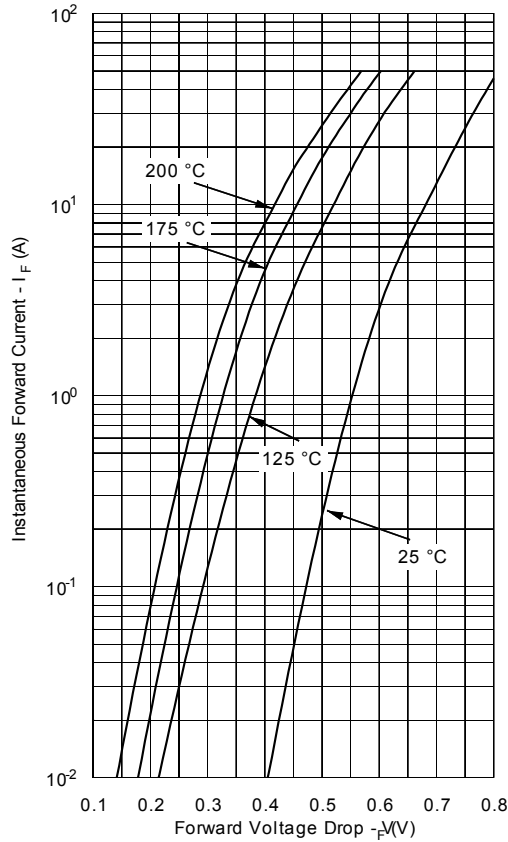
PINOUT TABLE

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

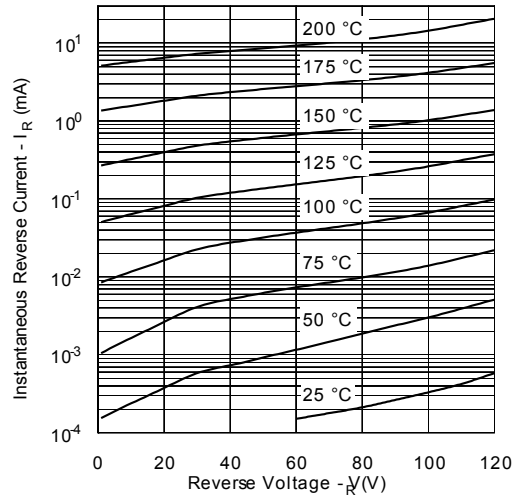
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Curves shown are for bare die only.

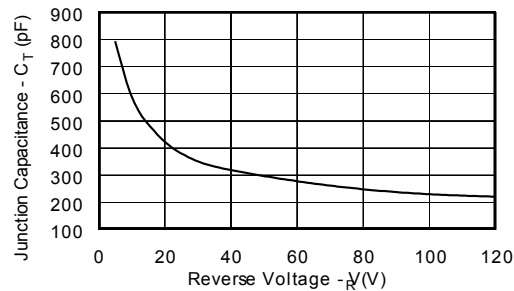
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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