

SENSITRON
SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 209, REV A

HERMETIC ULTRAFAST RECOVERY RECTIFIER

DESCRIPTION: 100 VOLT, 40 AMP, 35 NANOSECOND, HERMETIC RECTIFIER IN A TO-254 PACKAGE.

MAX RATINGS/ELECTRICAL CHARACTERISTICS

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

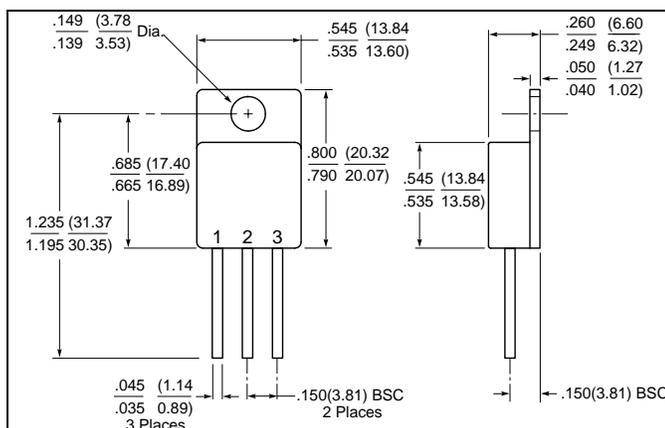
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	100	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) ($I_f = 10$ Amps) $I_f = 10\text{A}, T_A = 25^\circ\text{C}$ $I_f = 10\text{A}, T_A = 125^\circ\text{C}$	V_f	1.0 0.83	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 100^\circ\text{C}$)	I_o	40	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3$ msec.	I_{FSM}	300	Amps
MAXIMUM REVERSE RECOVERY TIME ($I_f = 0.5\text{A}, I_r = 1.0\text{A}, I_{rr} = 0.25\text{A}$)	t_{rr}	35	nsec
MAXIMUM REVERSE CURRENT I_r @ PIV (PER LEG)	I_r	10 1.0	μA mA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	2.3	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	-	-65 to +200	$^\circ\text{C}$
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}, f = 1\text{mHz}$ $V_{SIG} = 50\text{mV (p-p) (Max)}$	C_J	150	pF

* Suffix R denotes common anode version.



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MECHANICAL DIMENSIONS: In Inches / mm

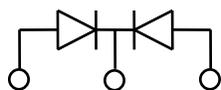


TO-254

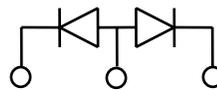
PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (R)	CATHODE 1	COMMON ANODE	CATHODE 2

SCHEMATIC



COMMON CATHODE



COMMON ANODE

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TECHNICAL DATA

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