

TECHNICAL DATA
DATA SHEET 209, REV B

HERMETIC ULTRAFAST RECOVERY RECTIFIER

FEATURES:

- Isolated hermetic package (TO-254)
- Add Suffix "S" for S-100 Screening per MIL-PRF-19500
- Add Suffix "SA" for S-100 Screening per MIL-PRF-19500 with Group A Testing

DESCRIPTION: 100 VOLT, 15 AMP, 35 NANOSECOND, HERMETIC RECTIFIER IN A TO-254 PACKAGE.

MAX RATINGS/ELECTRICAL CHARACTERISTICS

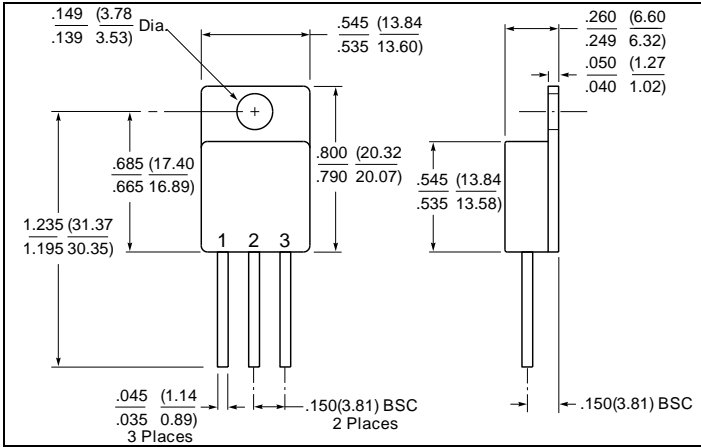
ALL RATINGS ARE AT $T_A = 25\text{ }^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	100	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) ($I_f = 10$ Amps) $I_f = 10\text{A}, T_A = 25\text{ }^\circ\text{C}$ $I_f = 20\text{A}, T_A = 25\text{ }^\circ\text{C}$ $I_f = 10\text{A}, T_A = -65\text{ }^\circ\text{C}$	V_f	1.0 1.20 1.15	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 100\text{ }^\circ\text{C}$)	I_o	15	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3$ msec.	I_{FSM}	150	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) $T_A = 25\text{ }^\circ\text{C}$ $T_A = 100\text{ }^\circ\text{C}$	I_r	10 1.0	μA mA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	2.3	$^\circ\text{C}/\text{W}$
MAXIMUM OPERATING TEMPERATURE RANGE	-	-65 to +175	$^\circ\text{C}$
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}, f = 1\text{MHz}$ $V_{SIG} = 50\text{mV (p-p)}$	C_J	150	pF

* Suffix R denotes common anode version.

SENSITRON
TECHNICAL DATA
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MECHANICAL DIMENSIONS: In Inches / mm



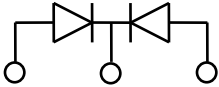
TO-254

PINOUT TABLE

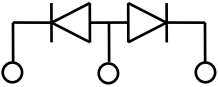
TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (R)	CATHODE 1	COMMON ANODE	CATHODE 2

SCHEMATIC

COMMON CATHODE



COMMON ANODE



PART ORDERING INFORMATION:

Part Number	Description
1N6657S	Includes S-100 screening per MIL-PRF-19500
1N6657SA	Includes S-100 screening per MIL-PRF-19500 with Group A Testing
1N6657RS	Includes S-100 screening per MIL-PRF-19500, Common Anode
1N6657RSA	Includes S-100 screening per MIL-PRF-19500 with Group A Testing, Common Anode

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