

**TECHNICAL DATA**  
**DATA SHEET 454, REV. -**

## HERMETIC POWER SCHOTTKY RECTIFIER

### Ultra Low Reverse Leakage Very Low Voltage Drop

**DESCRIPTION:** A 100 VOLT, 30 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

**MAXIMUM RATINGS**

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$ ) (SINGLE) Total Current Limited by Die.	$I_o$	30	Amps
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$ ) (COMMON CATHODE). Current Limited by Device.	$I_o$	35	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine) (per leg)	$I_{FSM}$	150	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r = 5\text{V}$ ) (per leg)	$C_T$	1000	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) (per leg)	$R_{\theta JC}$	0.77	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	Top	-65 to + 200	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	$^\circ\text{C}$

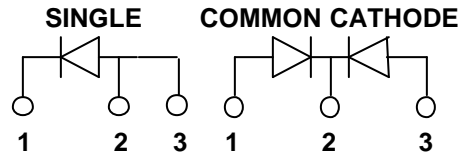
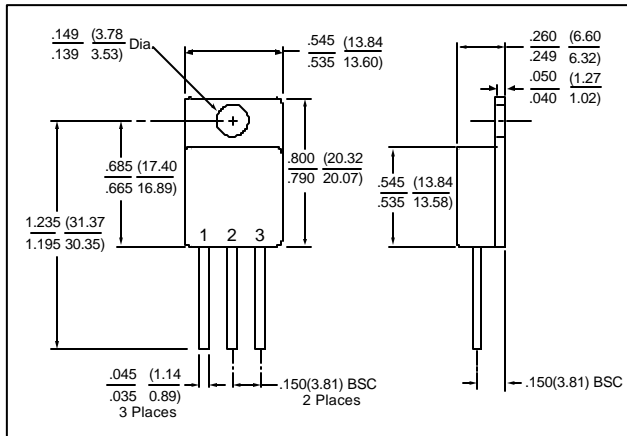
**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 30\text{ Amps}$ ) (per leg) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$V_f$	1.01 0.85	Volts
MAXIMUM REVERSE CURRENT ( $I_r @ 100\text{V PIV}$ ) (per leg) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$I_r$	0.2 2.0	mA

**SENSITRON**

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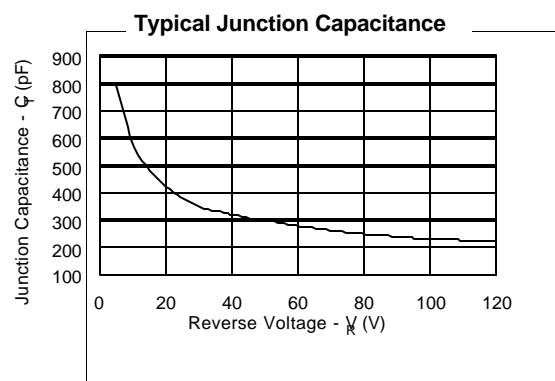
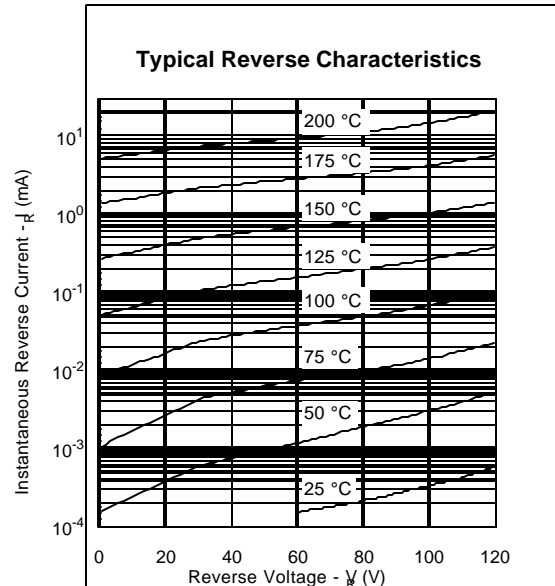
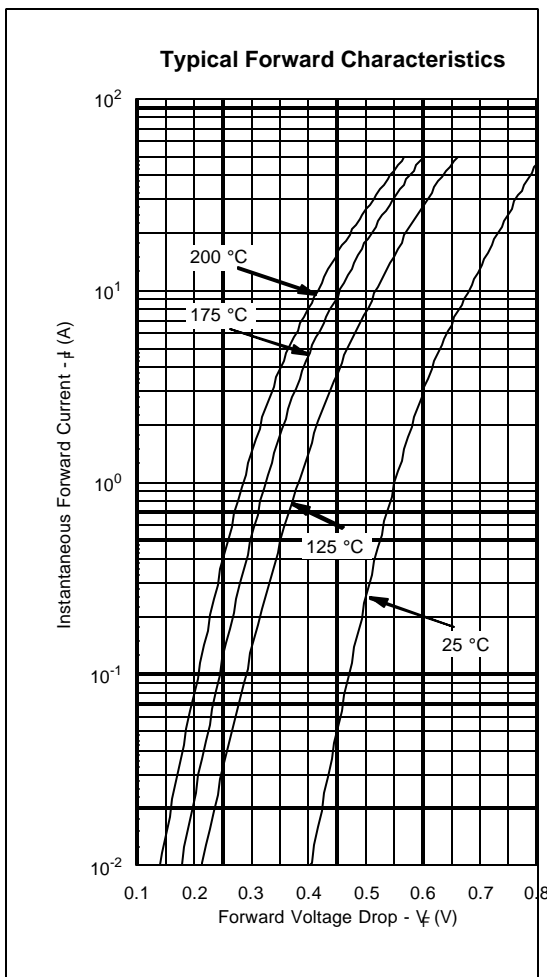
**MECHANICAL DIMENSIONS: In Inches / mm**



**TO-254**

**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



**Note:** The  $V_f$  curves shown are for the SD175SCU100A unpackaged die only.

**TECHNICAL DATA**

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