

**TECHNICAL DATA**  
**DATA SHEET 4052, REV. -****HERMETIC POWER SCHOTTKY RECTIFIER**  
**200°C Maximum Operation Temperature**

**DESCRIPTION:** A 100-VOLT, 30/45 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

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

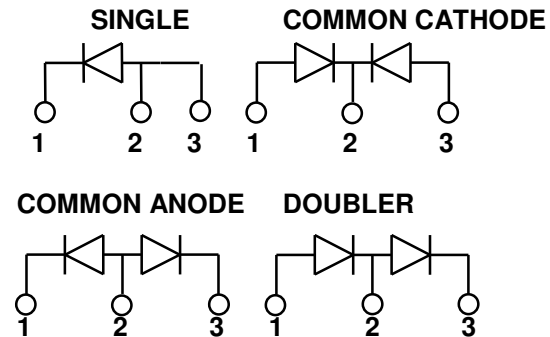
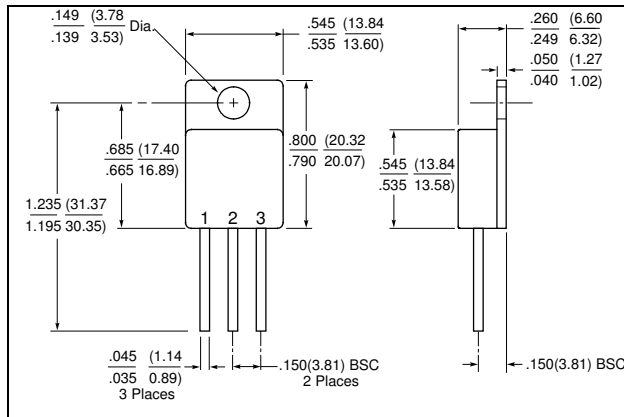
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100^\circ\text{C}$ ) (Single, Doubler)	$I_O$	30	Amps
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100^\circ\text{C}$ ) (Common Cathode, Common Anode)	$I_O$	45	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=8.3\text{ms}$ , Sine)	$I_{FSM}$	200	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	1000	pF
MAXIMUM THERMAL RESISTANCE (Single)	$R_{\theta JC}$	0.94	$^\circ\text{C/W}$
MAXIMUM THERMAL RESISTANCE (Common Cathode, Common Anode, Doubler)	$R_{\theta JC}$	0.47	$^\circ\text{C/W}$
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

**SENSITRON**  
**DATA SHEET 4052, REV. -**

**Mechanical Dimensions: In inches / mm**



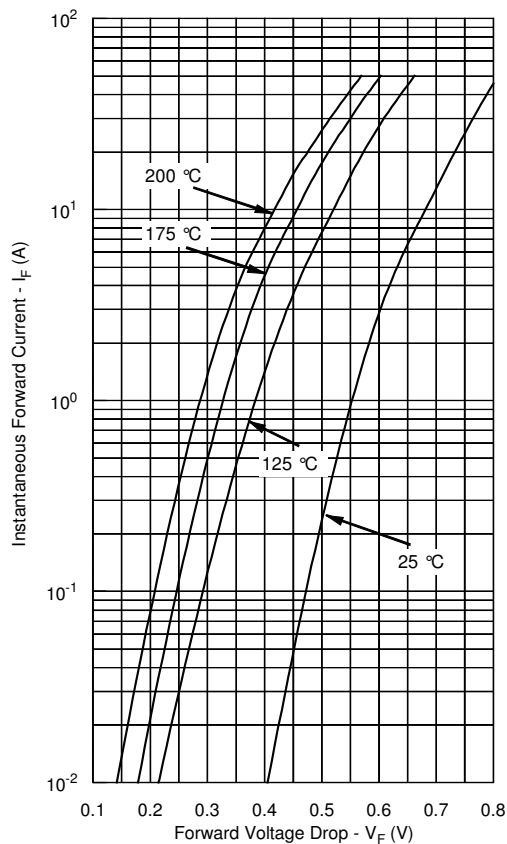
**TO-254**

**PINOUT TABLE**

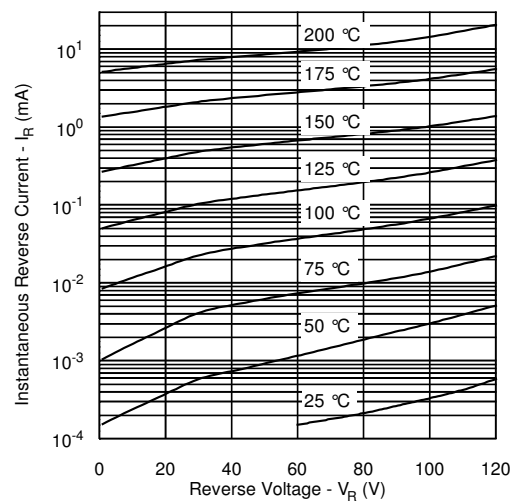
TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE

Curves shown are for bare die only.

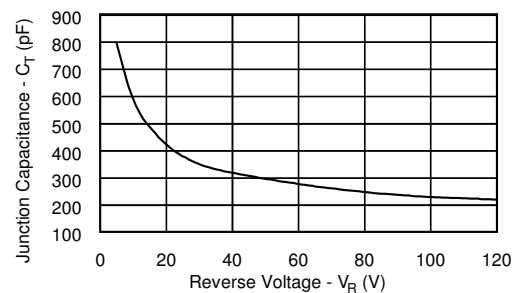
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**TECHNICAL DATA**

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