

TECHNICAL DATA  
DATA SHEET 4044, REV. A

## HERMETIC POWER SCHOTTKY RECTIFIER Very Low Forward Voltage Drop

**DESCRIPTION:** A 45-VOLT, 120 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC CERAMIC LCC-3P PACKAGE.

### MAXIMUM RATINGS

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_c=100^\circ\text{C}$ )	$I_o$	120	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	500	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	4800	pF
MAXIMUM THERMAL RESISTANCE	$R_{\theta JC}$	0.25	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

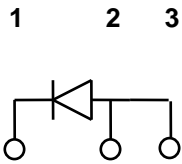
### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 45$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.68 0.58	Volts
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 120$ Amps) $T_J = 25^\circ\text{C}$	$V_f$	0.90	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 45V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	2.4 90	mA

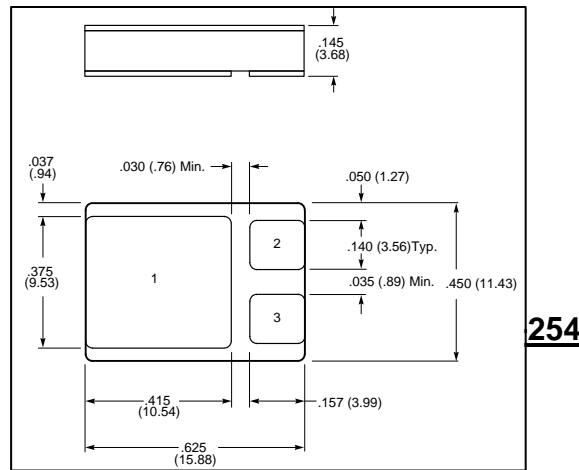
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DATA SHEET 4044, REV. A**

**SINGLE**



**MECHANICAL DIMENSIONS: In Inches / mm**



**254**

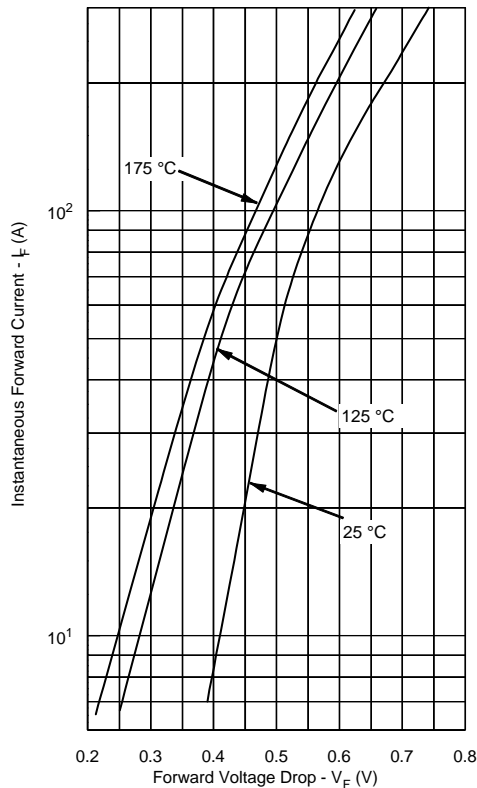
**LCC-3P**

**PINOUT TABLE**

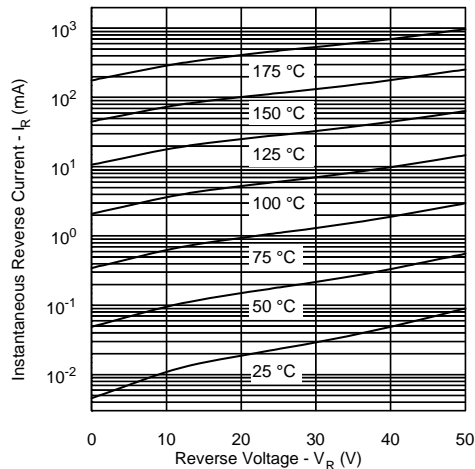
TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE

**Note:** The  $V_f$  curves shown are for the SD275SB45 un-packaged die only.

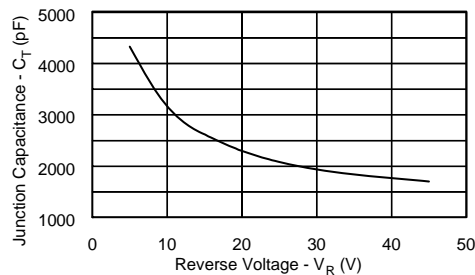
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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