

TECHNICAL DATA  
DATASHEET 6072, REV -

**HERMETIC POWER ULTRAFAST RECTIFIER SURFACE MOUNT**

**DESCRIPTION:** A 600-VOLT, 15 AMP, POWER ULTRAFAST RECTIFIER IN A HERMETIC SMD-1 PACKAGE.

**MAXIMUM RATINGS**

All ratings are @  $T_A = 25\text{ }^\circ\text{C}$  unless otherwise specified

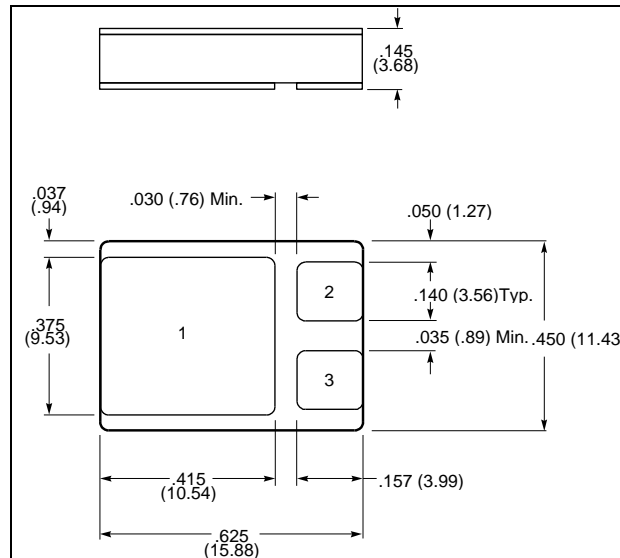
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	600	Volts
MAXIMUM DC OUTPUT CURRENT (With Case Maintained @ $T_C=100\text{ }^\circ\text{C}$ )	$I_o$	15	Amps
NON-REPETITIVE SINGLE CYCLE SURGE CURRENT	$I_{FSM}$	150	Amps
MAXIMUM REVERSE RECOVERY TIME ( $I_f = 0.5\text{A}$ , $I_r = 1\text{A}$ , $I_{rr} = 0.25\text{A}$ )	$t_{rr}$	60	nsec
MAXIMUM THERMAL RESISTANCE (Junction to Case) PER LEG	$R_{\theta JC}$	2.65	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	$T_J/T_{stg}$	-65 to + 175	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC				
MAXIMUM FORWARD VOLTAGE DROP, Pulsed	$T_C = 25\text{ }^\circ\text{C}$ ( $I_f = 15\text{ Amps}$ )	$V_f$	1.5	Volts
MAXIMUM FORWARD VOLTAGE DROP, Pulsed	$T_C = 125\text{ }^\circ\text{C}$ ( $I_f = 15\text{ Amps}$ )	$V_f$	1.4	Volts
MAXIMUM REVERSE CURRENT	$T_C = 25\text{ }^\circ\text{C}$ $I_r$ @ 600 PIV	$I_r$	10	$\mu\text{A}$
MAXIMUM REVERSE CURRENT	$T_C = 125\text{ }^\circ\text{C}$ $I_r$ @ 600 PIV	$I_r$	1000	$\mu\text{A}$

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**MECHANICAL DIMENSIONS: In Inches / mm**



**SMD-1**

**PINOUT TABLE**

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

**PART ORDERING INFORMATION:**

**SHD319373P XX X**

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**Part Number**

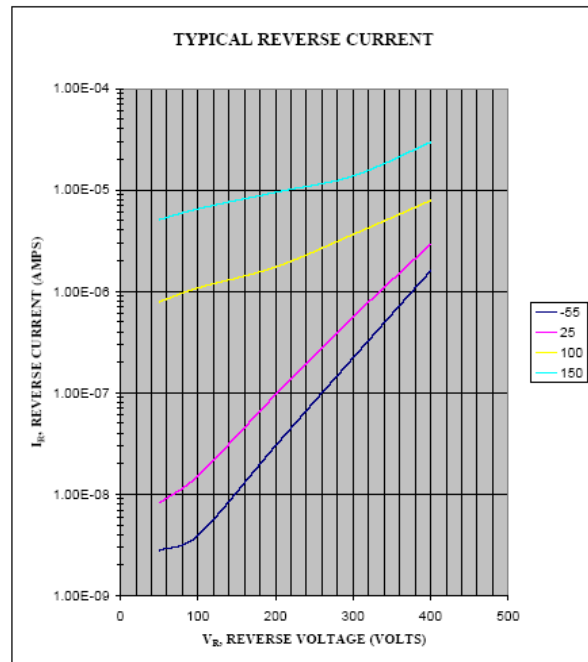
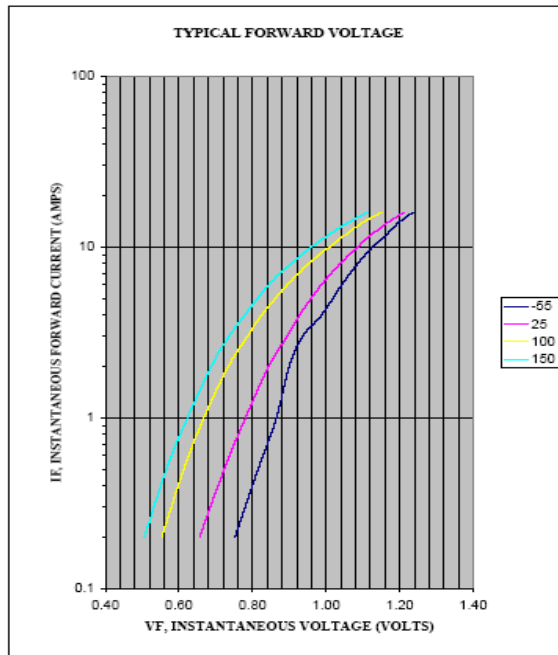
**Screening Level (blank is no screening):**

Suffix	Screened in Accordance with:
blank	No screening level
S	MIL-PRF-19500, TXV Level
SS	MIL-PRF-19500, S Level

**QCI (blank is no QCI):**

Suffix	Inspection in Accordance with:
blank	No QCI
Q	MIL-PRF-19500 QCI

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