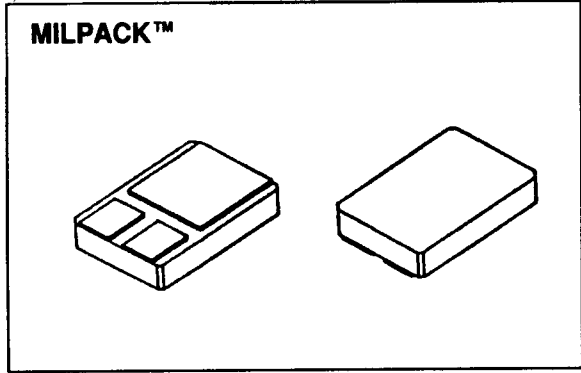


**15R6**

**50 AMP  
 150 VOLTS  
 50nsec  
 EPID<sup>®</sup>  
 RECTIFIER**

**Designer's Data Sheet**

- FEATURES:**
- EPID<sup>®</sup> High Voltage Schottky Process
  - Minimal recovery time and leakage increase over temperature versus comparable rectifiers
  - Lower capacitance than conventional Schottkys
  - Hyper Fast Recovery: 50 nsec Maximum
  - Higher Surge Ratings available
  - Hermetically Sealed Surface Mount Package
  - Gold Eutectic Die Attach available
  - Ultrasonic Aluminum Wire Bonds
  - Higher Voltage classes available
  - TX, TXV and Space Level Screening Available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage  15R6	VRRM VRWM VR	150	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	50	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	400	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, note 3	RθJC	1.5	°C/W

15R6

PRELIMINARY



SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638  
 Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

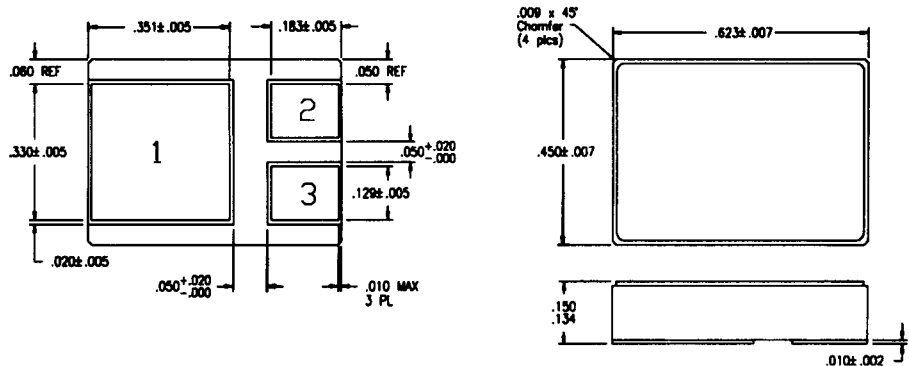
**ELECTRICAL CHARACTERISTICS**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA=25°C, 300µs Pulse) note 1 (IF = 50 Adc, TA=25°C, 300µs Pulse) note 1	VF	0.87 0.95	Vdc
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA= 100°C, 300µs Pulse) note 1 (IF = 25 Adc, TA= - 55°C, 300µs Pulse) note 1	VF	0.77 1.0	Vdc
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300µs pulse minimum)	IR	100	µA
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300µs pulse minimum)	IR	2	mA
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	CJ	250	pf
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	50	nsec

**CASE OUTLINE: MILPACK**

**PIN 1: CATHODE**  
**PIN 2: ANODE**  
**PIN 3: ANODE**

**NOTE 1:**  
 Connect pins 2 & 3  
 in application.



**TYPICAL OPERATING CURVES**  
 TA=25°C Unless otherwise specified

