

**1N6690-1N6693
thru
1N6690US-1N6693US**

Designer's Data Sheet

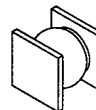
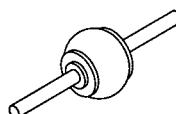
FEATURES:

- Replaces DO-4 and DO-5
- Ultra Fast Recovery
- PIV to 1200 Volts
- Low Reverse Leakage Current
- Hermetically Sealed Void-Free Construction *
- Monolithic Single Chip Construction
- High Surge Rating
- Low Thermal Resistance
- Available in surface mount versions (-US Suffix)

- TX, TXV, and Space Level Screening available

**20 AMP
600-1200 VOLTS
75 nsec
ULTRA FAST
RECTIFIER**

AXIAL & SURFACE MOUNT



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage 1N6690 & 1N6690US 1N6691 & 1N6691US 1N6692 & 1N6692US 1N6693 & 1N6693US	VRRM VRWM VR	600 800 1000 1200	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	20	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	375	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Lead, L=3/8" Junction to End Tab	RθJL RθJE	3 2.5	°C/W

* PIND Testing not required on Void Free devices per MIL-S-19500

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET#:RU0143 B

RMD

1N6690-1N6693 thru 1N6690US-1N6693US

PRELIMINARY



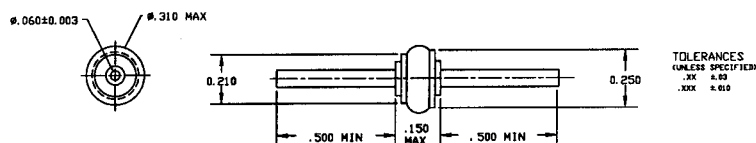
SOLID STATE DEVICES, INC

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

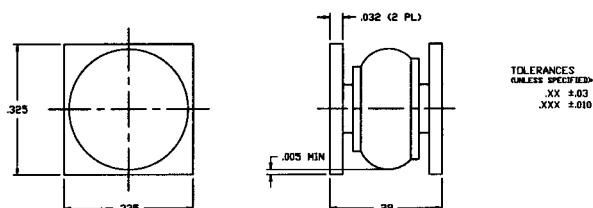
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 20 Adc, TA=25°C, 300μs Pulse)	VF	1.9	Vdc
Instantaneous Forward Voltage Drop (IF = 20 Adc, TA= - 65°C, 300μs Pulse)	VF	2.2	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300μs pulse minimum)	IR	10	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300μs pulse minimum)	IR	5	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	250	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	75	nsec

CASE OUTLINE: AXIAL

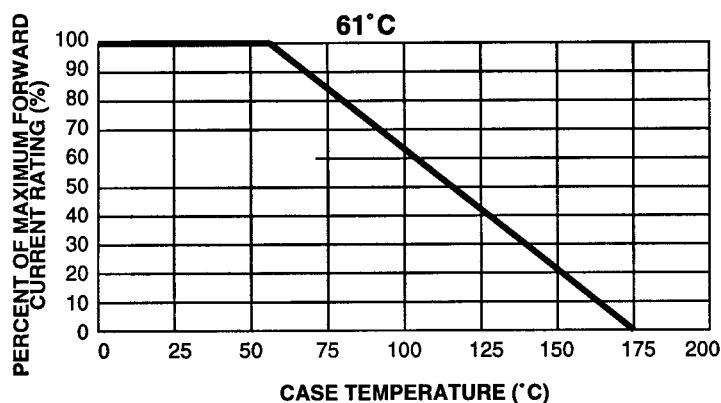


CASE OUTLINE: SURFACE MOUNT



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified



FORWARD VOLTAGE (Vf)

SRM6UF - SRM12UF

