

SCHOTTKY BARRIER RECTIFIER
VOLTAGE RANGE 100 Volts CURRENT 15 Ampere

FEATURES

- * Metal of silicon rectifier , majority carrier conduction
- * Guard ring for transient protection
- * Low power loss,high efficiency
- * High current capability
- * High surge capacity

MECHANICAL DATA

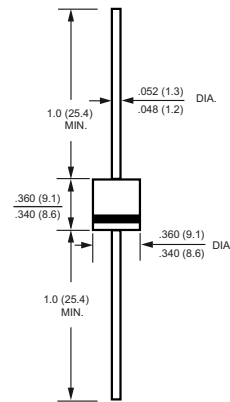
- * Epoxy: Device has UL flammability classification 94V-0
- * For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



R-6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	15SQ100	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	Volts
Maximum Average Forward Rectified Current at $T_L = 90^{\circ}C$	I_O	15	Amps
Peak Forward Surge Current I_{FSM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	275	Amps
Current Squared Time	I^2t	313.8	A^2Sec
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40	$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	15SQ100	UNITS
Maximum Forward Voltage at 15A DC	V_F	0.82	Volts
Maximum DC Average Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A = 25^{\circ}C$	5.0
		@ $T_A = 100^{\circ}C$	2.0

NOTES :1. RoHS Compliant
2. Thermal Resistance Junction to Case.

2024-06
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RATING AND CHARACTERISTICS CURVES (15SQ100)

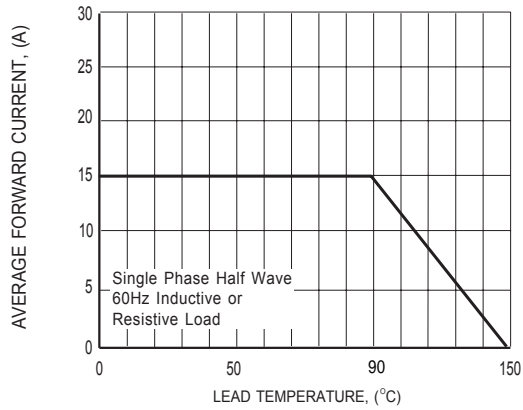


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

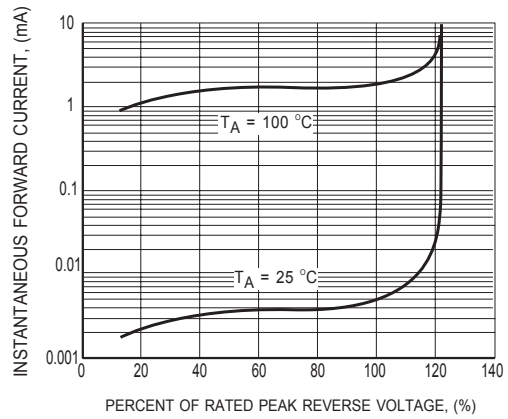


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

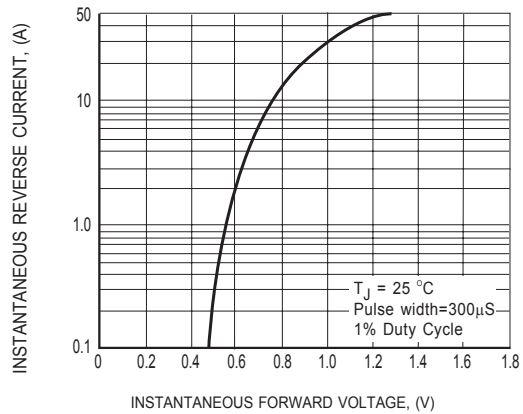


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

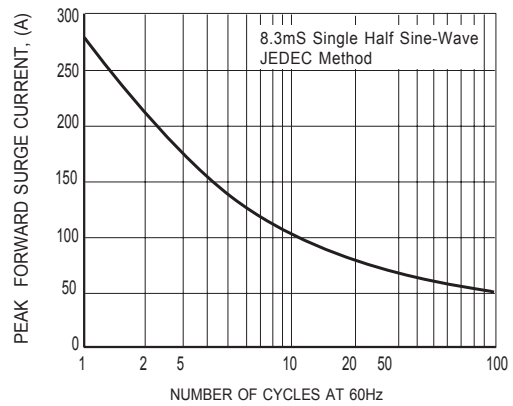
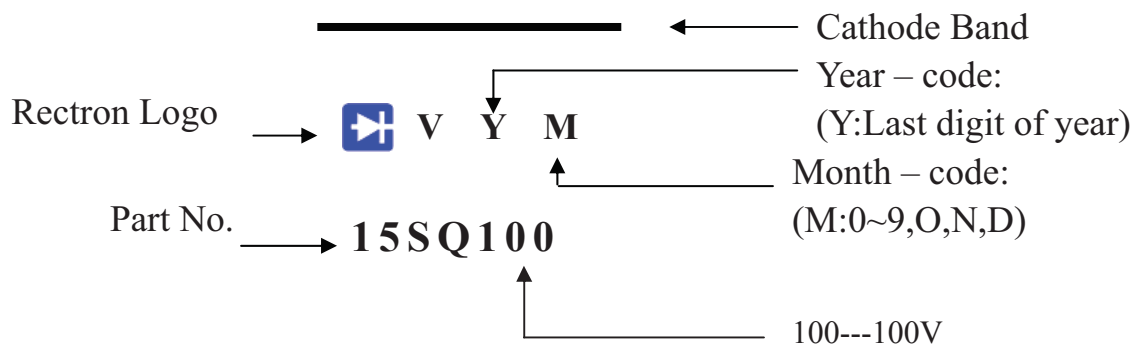


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
R-6/R-7	-B	200	300*73*40	347*320*271	4,800	12.93/14.57

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
R-6/R-7	-T	800	800	9.5	52	330	355*350*335	3,200	9.72/9.91

AMMO PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
R-6/R-7	-F	300	9.5	52	255*73*100	400*268*225	3,000	8.5/8.7

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