

15SQ030 THRU 15SQ100

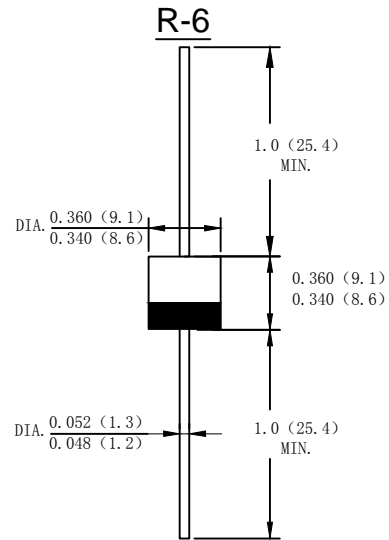
15.0 AMP.Schottky Barrier Rectifiers

Features

- Metal silicon rectifier,majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High surge capability
- High current capability,
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic R-6
- Polarity: Color band dented cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	15SQ 030	15SQ 035	15SQ 040	15SQ 045	15SQ 050	15SQ 060	15SQ 080	15SQ 100	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	21	24.5	28	31.5	31.5	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current.375"(9.5mm) lead length @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	15.0								A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	320								A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	425								A^2s
Forward Voltage @ $I_F=15.0\text{A}$ (Note 1)	V_{FM}	0.5			0.7		0.8			V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.3						0.05		mA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$		10						5		
Typical Junction Capacitance (Note2)	C_J	450								pF
Typical Thermal Resistance Junction to case	$R_{\theta JA}$	45								$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150								$^\circ\text{C}$
/Storage Temperature Range	T_{STG}	-55 to +150								$^\circ\text{C}$

Note:1. 300us Pulse Width,2%Duty Cycle

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

FIG 1-FORWARD CURRENT DERATING CURVE

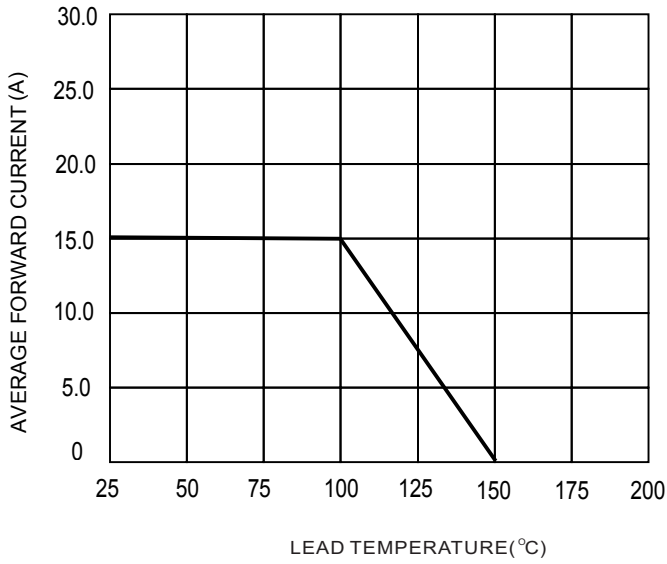


FIG.2-TYPICAL FORWARD CHARACTERISTICS

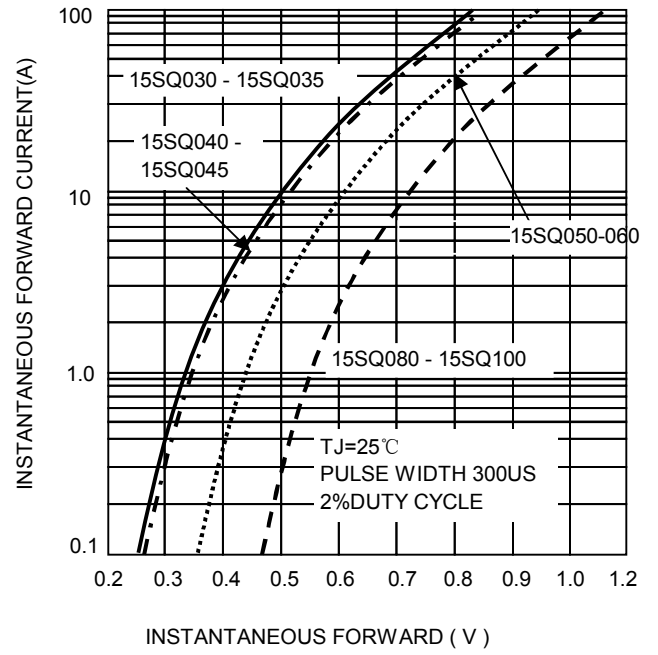


FIG.3-MAXIMUM NON-REPETITIVE SURGE

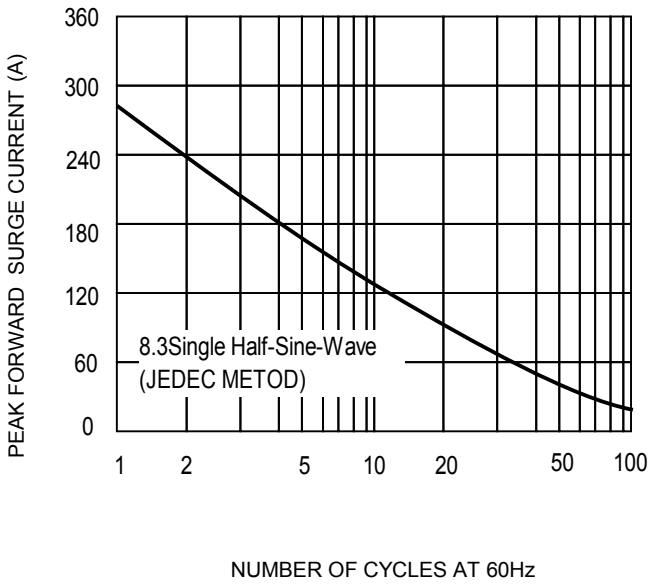
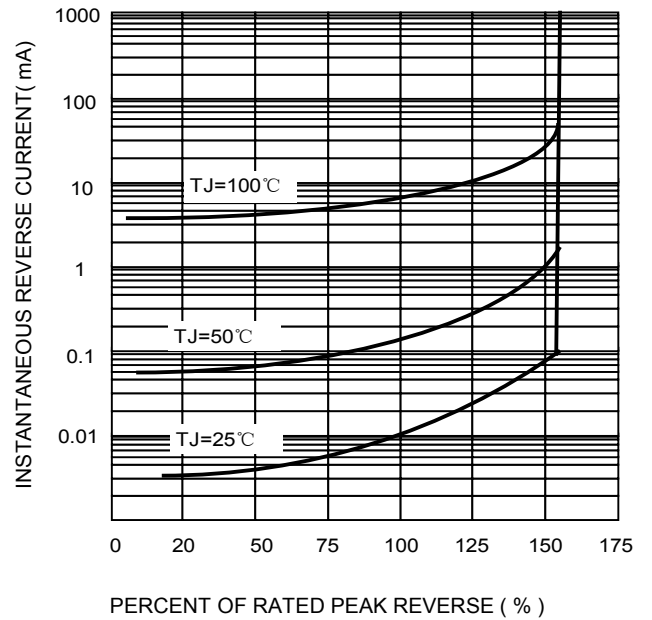


FIG 3-TYPICAL REVERSE CHARACTERISTICS



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