

25SQ030 THRU 25SQ060

SCHOTTKY BARRIER RECTIFIERS



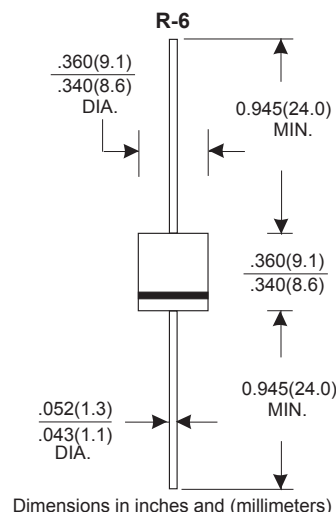
FEATURES

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

MECHANICAL DATA

- Case: R-6 molded plastic
- Polarity: As marked on the body
- Mounting position: Any

REVERSE VOLTAGE - **30 to 60**Volts
FORWARD CURRENT - **25.0** Amperes



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%

CHARACTERISTICS	SYMBOL	25SQ 030	25SQ 035	25SQ 040	25SQ 045	25SQ 050	25SQ 055	25SQ 060	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	55	60	V
Maximum RMS Voltage	V _{RMS}	21	25	28	32	35	39	42	V
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	55	60	V
Maximum Average Forward Rectified Current (See Fig.1) @T _c =95 °C	I _(AV)	25							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	275							A
Peak Forward Voltage at 12.5A DC(Note1)	V _F	0.55				0.7			V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =125°C	I _R	0.5				50			mA
Typical Thermal Resistance(Note2)	R _{θJc}	1.8							°C/W
Operating Temperature Range	T _J	-55 to +200							°C
Storage Temperature Range	T _{STG}	-55 to +200							°C

NOTES: 1. 300us pulse width, 2% duty cycle.

2. Thermal Resistance Junction to lead / terminal at a distance 1mm from case.

25SQ030 thru 25SQ060

FIG. 1 – FORWARD CURRENT DERATING CURVE

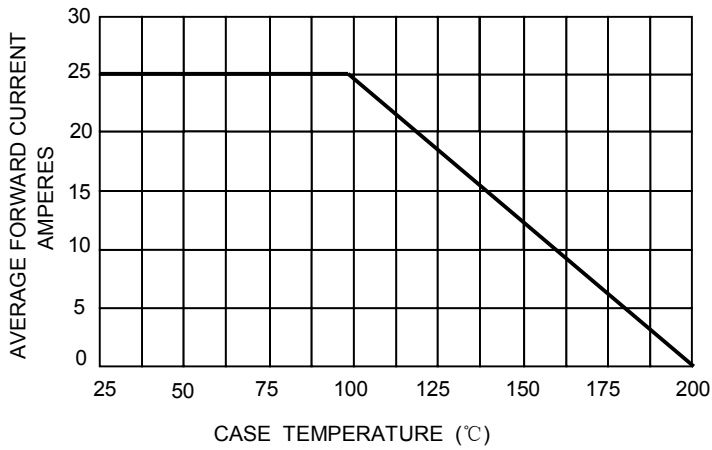


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

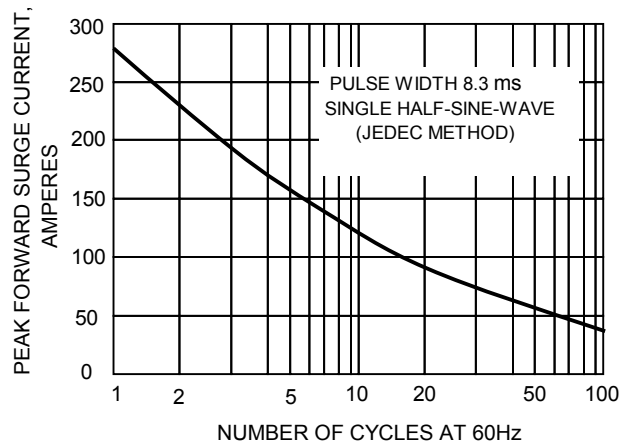


FIG.3-TYPICAL REVER CHARACTERISTICS

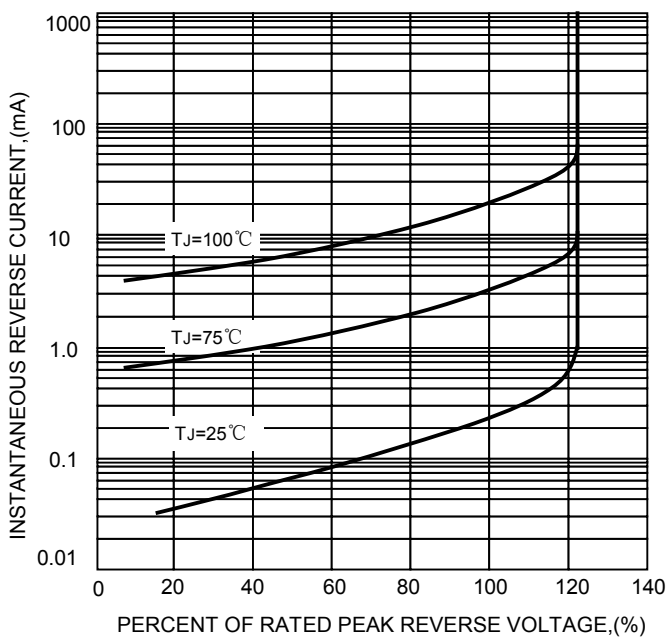


FIG.4-TYPICAL FORWARD CHARACTERISTICS

