



FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Guardring for overvoltage protection
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

MECHANICAL DATA

- Case :** Molded plastic body
- Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity :** Polarity symbol marking on body
- Mounting Position :** Any

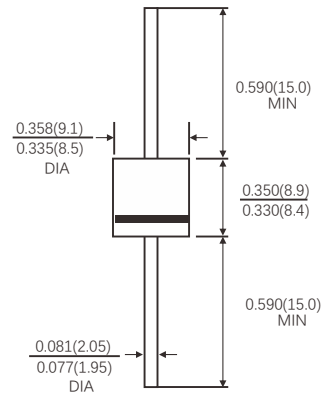
VOLTAGE RANGE

45 Volts

CURRENT

35.0 Amperes

R-6/2.0



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbols	30SQ045	Units
Maximum repetitive peak reverse voltage	V _{RRM}	45	Volts
Maximum RMS voltage	V _{RMS}	32	Volts
Maximum DC blocking voltage	V _{DC}	45	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I(AV)	35.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T _J)	I _{FSM}	450	Amps
Maximum instantaneous forward voltage at 35.0 A(Note 1)	V _F	0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	T _A =25°C	0.1
		T _A =100°C	20
Typical thermal resistance (Note 2)	R _{θJC}	1.0	°C/W
	R _{θJA}	45	
Operating junction temperature range at reduced reverse voltage V _R <=80%V _{RRM} in DC forward model	T _J	-55 to+150	°C
Storage temperature range	T _{STG}	-55 to+150	

- Notes:** 1.Pulse test: 300μ s pulse width,1% duty cycle
2.Thermal resistance from junction to case, Thermal resistance from junction to lead, Thermal resistance from junction to ambient

RATING AND CHARACTERISTIC CURVES (35SQ045)

FIG.1-FORWARD CURRENT DERATING CURVE

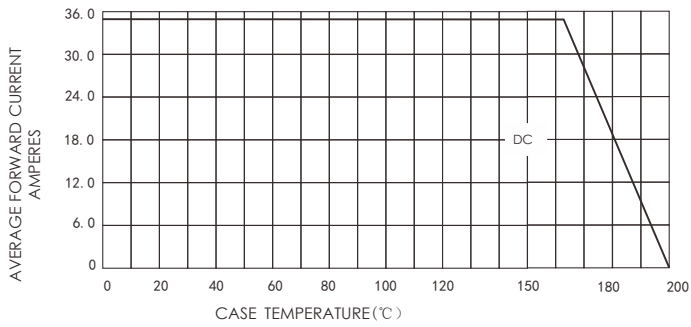


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

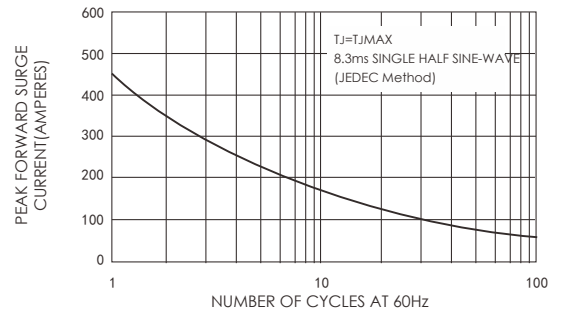


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

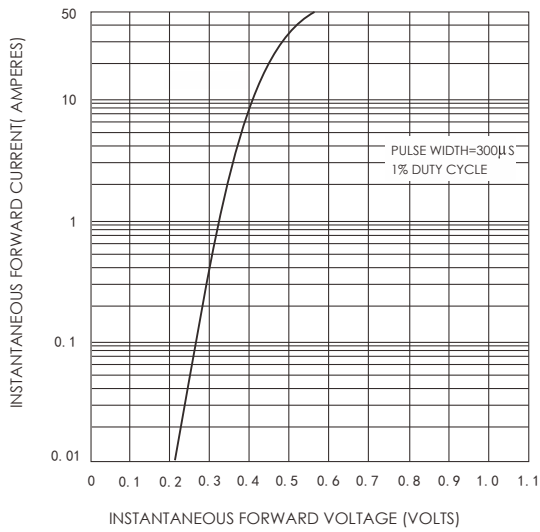


FIG.4-TYPICAL REVERSE CHARACTERISTICS

