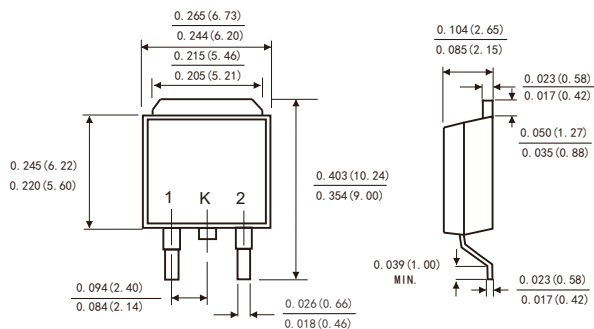


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed:260 °C/10 seconds, ,
- 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



TO-252



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-252 molded plastic body
- Terminals: Solderable per MIL-STD-202,method 208
- Polarity: As marked
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameters	Symbols	SR 1020M1	SR 1030M1	SR 1040M1	SR 1045M1	SR 1060M1	SR 10100M1	SR 10150M1	SR 10200M1	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	60	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	32	42	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	40	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	5.0								Amps
	Total device	10.0								
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150.0								Amps
Maximum instantaneous forward voltage at 5.0 A per leg(Notes 1)	V_F	0.60			0.75	0.85	0.90	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	$T_A=25^{\circ}C$	100				30				μA
	$T_A=100^{\circ}C$	5				-				mA
	$T_A=125^{\circ}C$	-				3				
Typical thermal resistance (Notes 2)	$R_{\theta JC}$	2.5								$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to+150								$^{\circ}C$
Storage temperature range	T_{STG}	-55 to+150								$^{\circ}C$

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

RATINGS AND CHARACTERISTIC CURVES SR1020M1 THRU SR10200M1

FIG.1-FORWARD CURRENT DERATING CURVE

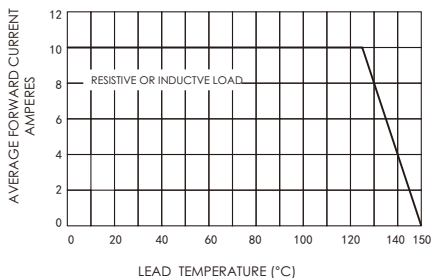


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

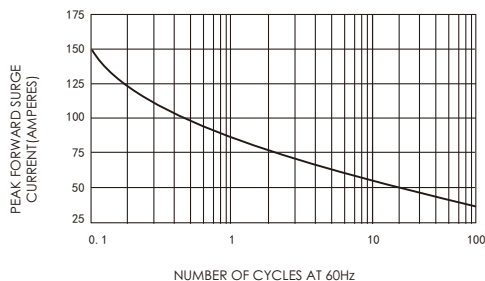


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

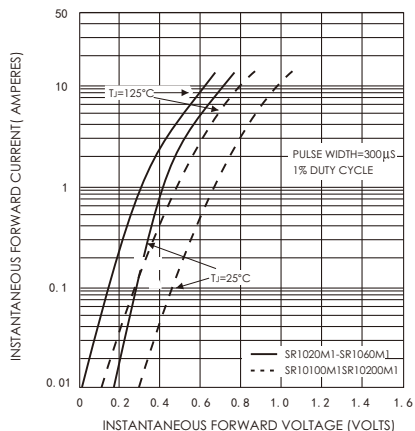


FIG.4-TYPICAL REVERSE CHARACTERISTICS

