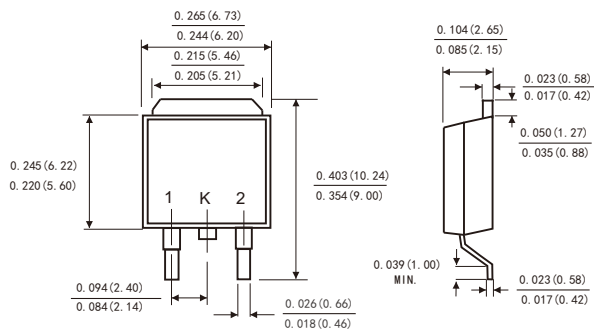


## FEATURES

- 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 10150D1	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)	$I_R$	100			30					$\mu A$
		5			-					mA
		-			3					
Typical thermal resistance (Notes 2)	$R_{\theta JC}$	2.5								°C/W
Operating junction temperature range	$T_J$	-55 to+150								°C
Storage temperature range	$T_{STG}$	-55 to+150								°C

**Notes:** 1.Pulse test: 300 $\mu s$  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

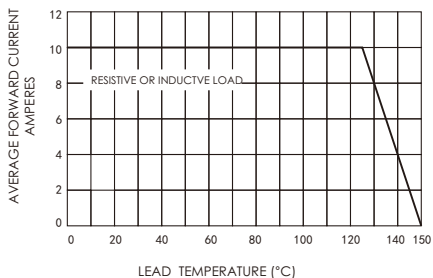


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

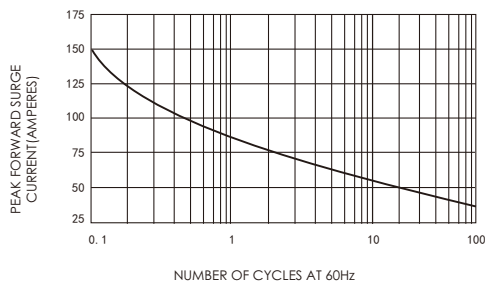


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

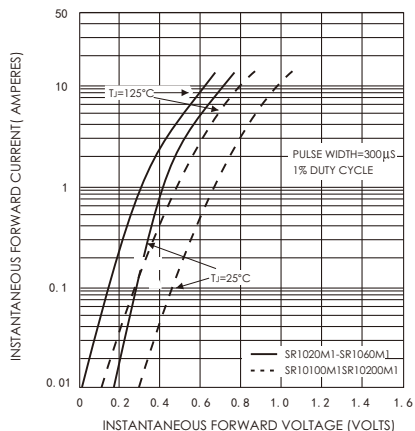


FIG.4-TYPICAL REVERSE CHARACTERISTICS

