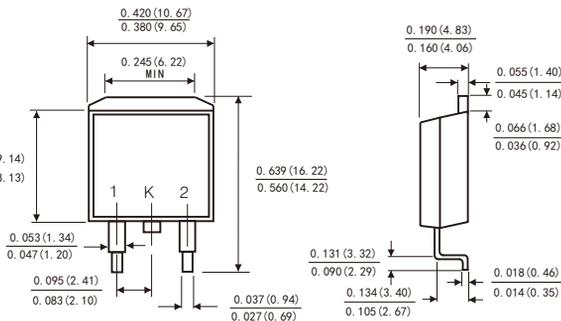


### FEATURES

- 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
- High surge capability
- 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-263AB



### MECHANICAL DATA

- Case: JEDEC TO-263AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Dimensions in inches and (millimeters)

### 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	SR2045D1	SR2060D1	SR20100D1	SR20150D1	SR20200D1	Units
Maximum repetitive peak reverse voltage	VRRM	40	60	100	150	200	Volts
Maximum RMS voltage	VRMS	28	42	70	105	140	Volts
Maximum DC blocking voltage	VDC	40	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	Per leg	10.0					Amps
	Total device	20.0					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200.0					Amps
Maximum instantaneous forward voltage at 10.0 A	VF	0.60	0.75	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25°C	100		20			μA
	TA=100°C	5		-			mA
	TA=125°C	-		3			
Typical thermal resistance (Note 2)	RθJC	2.5					°C/W
Operating junction temperature range	TJ	-55 to+150					°C
Storage temperature range	TSTG	-55 to+150					°C

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

# RATINGS AND CHARACTERISTIC CURVES SR2045D1 THRU SR20200D1

FIG.1-FORWARD CURRENT DERATING CURVE

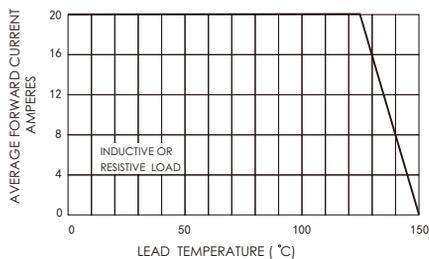


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

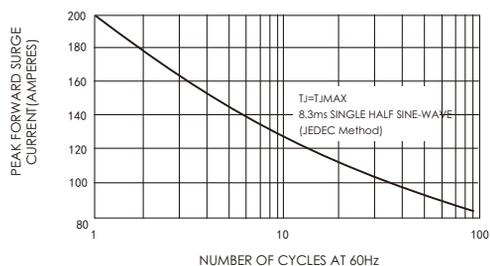


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

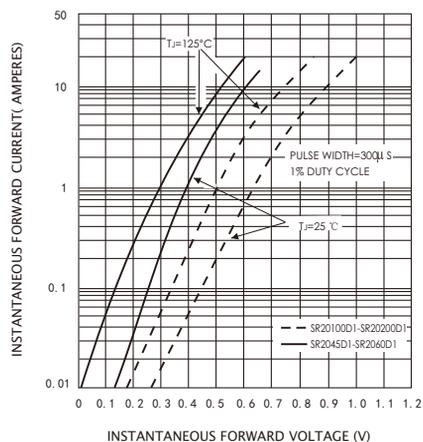


FIG.4-TYPICAL REVERSE CHARACTERISTICS

