SR1640D1 THRU SR16200D1

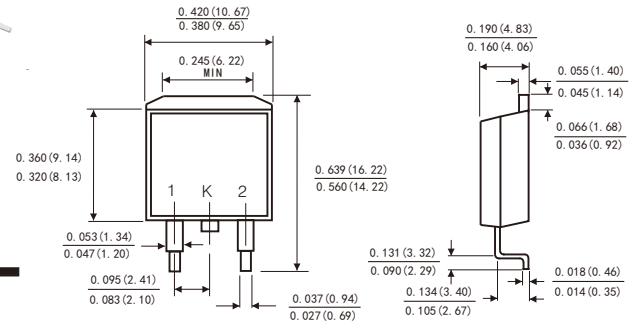
SEMICONDUCTOR

SCHOTTKY BARRIER RECTIFIER
Reverse Voltage - 40 to 200 Volts
Forward Current - 16.0Amperes

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



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-263AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- 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	SR1640D1	SR1660D1	SR16100D1	SR16150D1	SR16200D1	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	I(AV)	8. 0					Amps
	Total device		16.0					
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 8.0 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	IR	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

FIG.1-FORWARD CURRENT DERATING CURVE

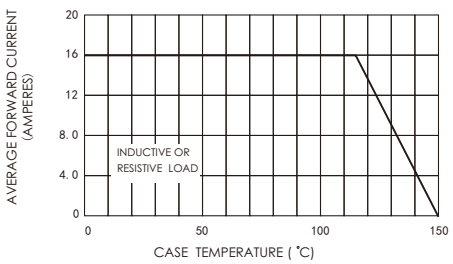


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

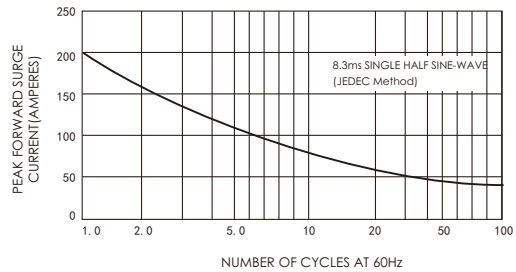


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

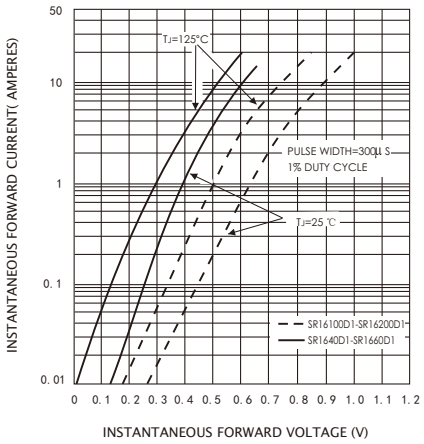


FIG.4-TYPICAL REVERSE CHARACTERISTICS