

SR4035D1 THRU SR40200D1

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 35 to 200 Volts

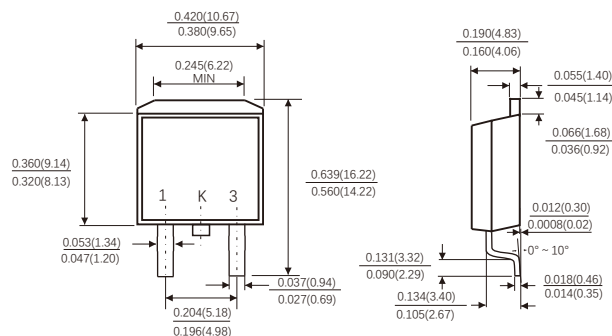
Forward Current - 40.0Amperes

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
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



TO-263 D2PAK



MECHANICAL DATA

- Case: JEDEC TO-263 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%.)

		Symbols	SR 4035D1	SR 4040D1	SR 4045D1	SR 4060D1	SR 40100D1	SR 40150D1	SR 40200D1	Units
Maximum repetitive peak reverse voltage		VRRM	35	40	45	60	100	150	200	Volts
Maximum RMS voltage		VRMS	25	28	32	42	70	105	140	Volts
Maximum DC blocking voltage		VDC	35	40	45	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I(AV)	20.0 40.0							Amps
	Total device									
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	300.0							Amps
Maximum instantaneous forward voltage at 20.0 A per leg		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	200				50			μA
	TA=100°C		5				-			mA
	TA=125°C		-				5			
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 SR4035D1 THRU SR40200D1

FIG.1-FORWARD CURRENT DERATING CURVE

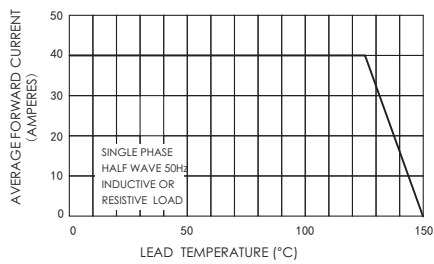


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

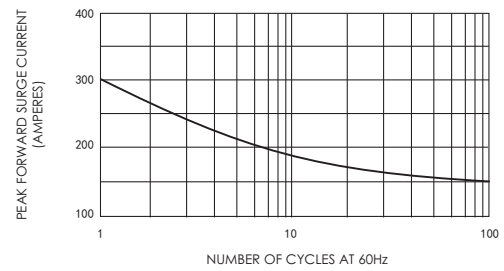


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

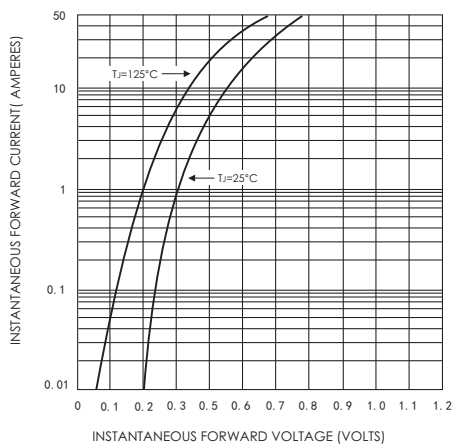


FIG.4-TYPICAL REVERSE CHARACTERISTICS

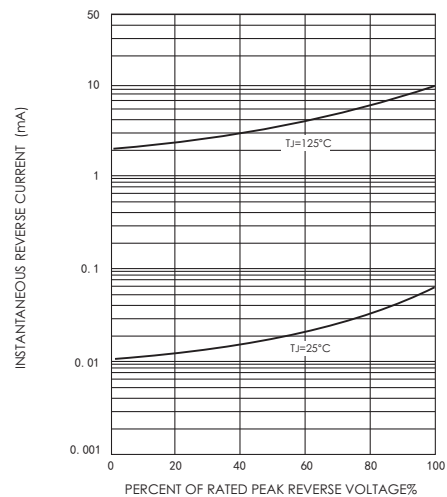


FIG.5-TYPICAL JUNCTION CAPACITANCE

