SR2020 THRU SR20200

TO-220AB



SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 20Amperes

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 RoH\$ 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

· Case: JEDEC TO-220AB molded plastic body

· Terminals: Lead solderable per MIL-STD-750, method 2026

Polarity: As marked Mounting Position: Any

· Weight: 0.08ounce, 2.24 grams



0. 185 (4. 70) 0. 175 (4. 44) 0. 161 (4. 10) 0.415 (10.54) 0. 148 (3. 74) DIA 0. 055 (1. 39) 0.045 (1.14) 0. 114 (2. 90) 0. 102 (2. 60) 0.145 (3.68) 0. 135 (3. 43) 0. 610 (15. 57) 0. 571 (14. 50) 0. 410 (10. 41) 0. 380 (8. 89) 0.635 (16.13) 0.390(9.91) 0. 330 (8. 38) 0.625 (15.87) PIN 1. 161 (29. 50) 1. 106 (28. 10) 0. 590 (14. 22) 0.516 (13.10)

0.037 (0.94)

0. 105 (2. 67)

0. 208 (5. 28)

Dimensions in inches and (millimeters)

0.014(0.35)

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 2020	SR 2030	SR 2040	SR 2050	SR 2060	SR 2080	SR 20A0	SR 20150	SR 20200	Units
Maximum repetitive peak reverse voltage	Vrrm	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	l(AV)	20.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	İfsm	200.0									Amps
Maximum instantaneous forward voltage at 20.0 A	VF	0.60			0.3	75	0.85		0. 90	0. 95	Volts
Maximum instantaneous reverse T _c =25°C	1-	0.5									_
current at rated DC blocking voltage(Note 1) T _c = 125°C	lr	30			50					m A	
Typical thermal resistance (Note 2)	$R_{ heta}$ JC	3. 0									°C/W
Operating junction temperature range	TJ	-65 to+150									Č
Storage temperature range	Tstg	-65 to+150									°C

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

1-142

NO.51 HEPING ROAD JINAN P.R. CHINA TEL:86-531-86943657 FAX:86-531-86947096 WWW.JIFUSEMICON.COM

JINAN JINGHENG CO., LTD.

RATINGS AND CHARACTERISTIC CURVES SR2020 THRU SR20200

FIG.1-FORWARD CURRENT DERATING CURVE

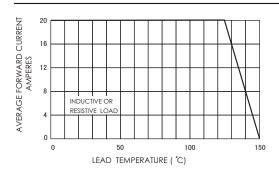


FIG.3-TYPICAL INSTANTANEOUS FORWARD **CHARACTERISTICS**

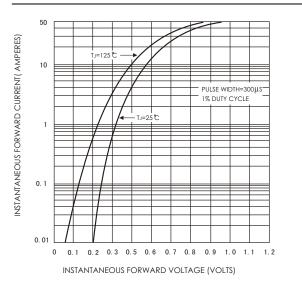


FIG.5-TYPICAL JUNCTION CAPACITANCE

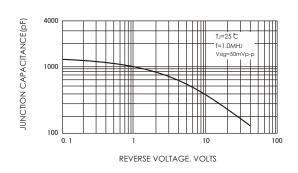


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

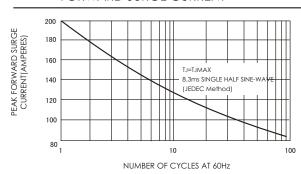


FIG.4-TYPICAL REVERSE CHARACTERISTICS

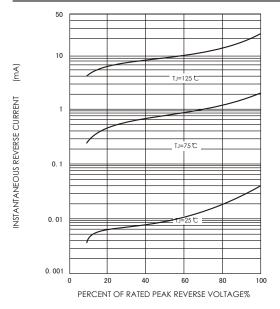
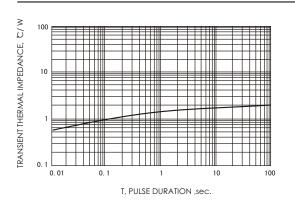


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



1-143

NO.51 HEPING ROAD JINAN P.R. CHINA TEL:86-531-86943657 FAX:86-531-86947096 JINAN JINGHENG CO., LTD.