



SR520 THRU SR5200

VOLTAGE RANGE

20 to 200 Volts

CURRENT

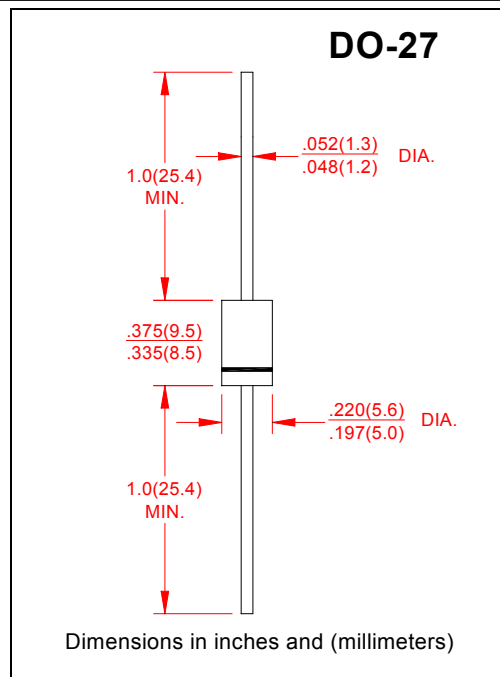
5.0 Ampere

Features

- Fast switching speed
- Low forward voltage
- Low power high efficiency
- High surge capability
- High temperature soldering guaranteed
250°C/10 seconds,0.373”(9.5mm)lead length

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead :Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.042ounce, 1.19 gram



Maximum Ratings and Electrical Characteristics

- Ratings at 25°C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

TYPE NUMBER	SYMBOLS	SR52	SR54	SR56	SR58	SR510	SR5150	SR5200	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at TLsee figure 1 TL =100°C	$I_{(AV)}$	5.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amps
Maximum Instantaneous Forward Voltage @ 5.0A(Note1)	V_F	0.55	0.7	0.85			0.95	Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ C$	0.5					0.15		mA
	$T_A = 100^\circ C$	20			10		1.5		
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55							°C/W
	$R_{\theta JL}$	12							
Operating Junction Temperature	T_J	(-55 to +125)			(-55 to +150)				°C
Storage Temperature Range	T_{STG}	(-55 to +150)							°C

Notes:

1. Pulse test:300µs pulse width,1% duty cycle
2. Thermal Resistance from junction to Ambient at .375”(9.5mm)lead length, P.C.board mounted.



Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

FIG.1-FORWARD CURRENT DERATING CURVE

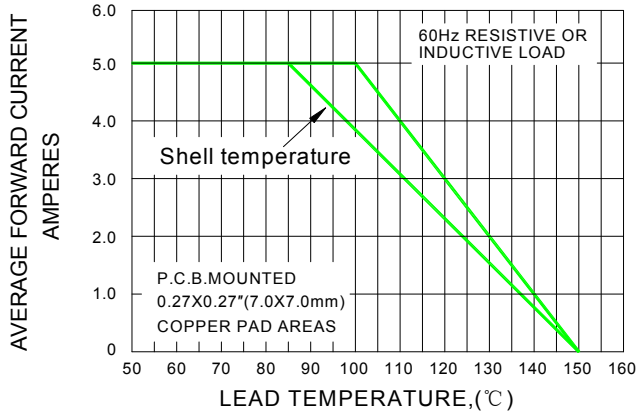


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

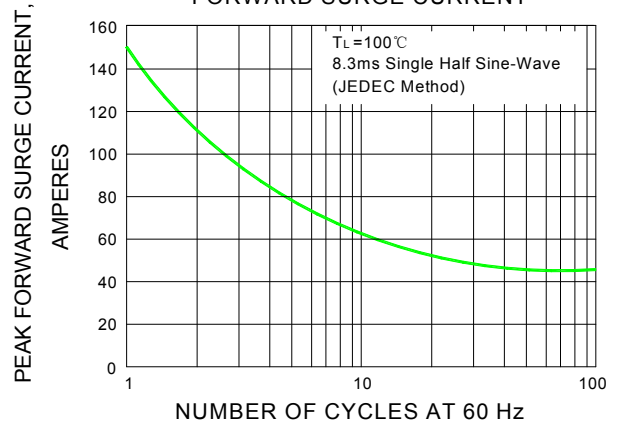


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

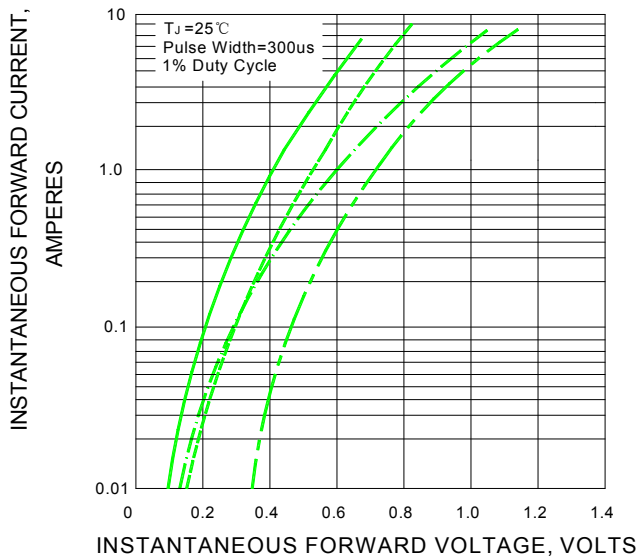


FIG.4-TYPICAL REVERSE CHARACTERISTICS

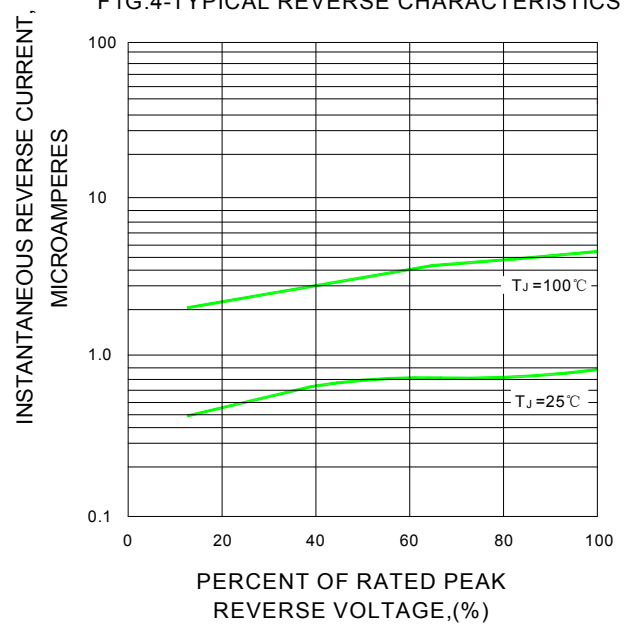


FIG.5-TYPICAL JUNCTION CAPACITANCE

