

5.0 A Schottky Barrier Rectifier
Rectifier Reverse Voltage 20 to 100V



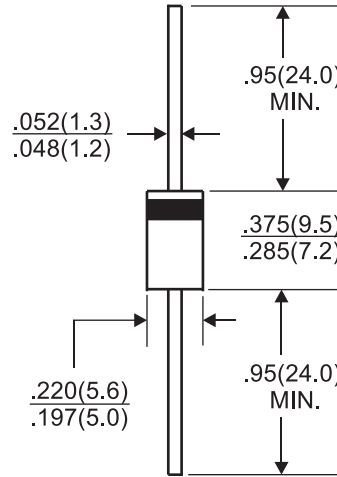
Features

- Extremely low VF
- Epitaxial construction
- Low power loss, high efficiency
- Low stored charge, majority carrier construction
- Plastic material has UL flammability classification 94V-0

Mechanical Data

Case: Molded plastic
 Terminals: Solder plated solderable per MIL-STD-202, Method 208
 Polarity: Cathode band
 Mounting Position: Any
 Weight: 1.10 grams (approx)

DO-27



All dimensions inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
 For Capacitive load derate current by 20%.

Parameter	Symbol	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	unit
Maximum recurrent peak reverse voltage	VRRM	20	30	40	50	60	80	100	V
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	V
Maximum average forward rectified current 9.5 mm lead length (see fig.1)	IF(AV)	5.0							A
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC Method)	IFSM	150							A
Typical thermal resistance	RthJA	25							°C /W
Typical junction capacitance	Cj	200							pF
Operating junction temperature range	TJ	-55 to + 125							°C
Storage temperature range	TSTG	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
 For Capacitive load derate by 20 %.

Parameter	Symbol	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	Unit
Maximum instantaneous forward voltage drop at 5.0A	VF	0.55			0.70		0.85		V
Maximum DC reverse current at rated DC blocking voltage per element	IR				5.0 50.0				mA

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

SR520 thru SR5100

Fig. 1 Forward Current Derating Curve

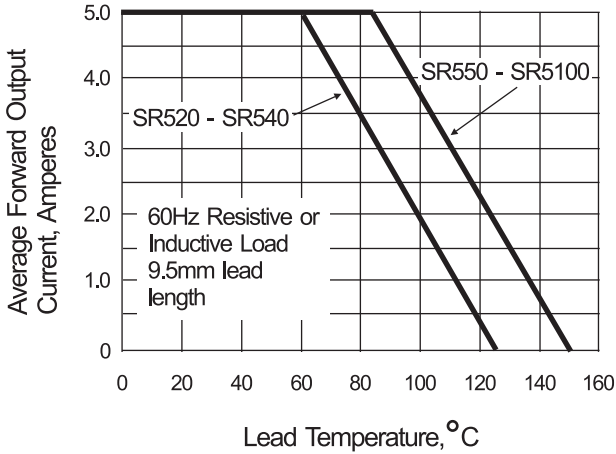


Fig. 2 Typical Instantaneous Forward Characteristics

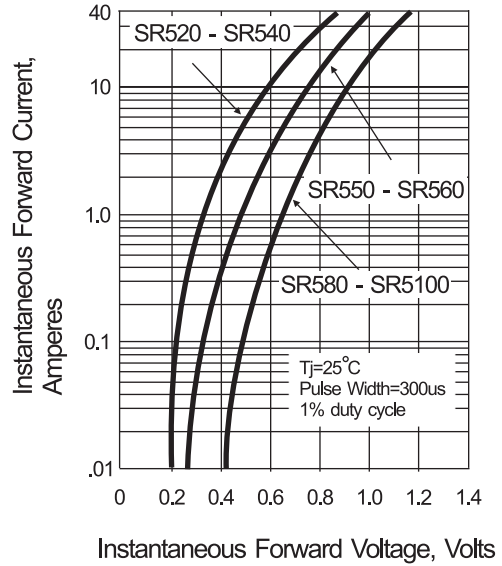


Fig. 3 Maximum Non-repetitive Forward Surge Current

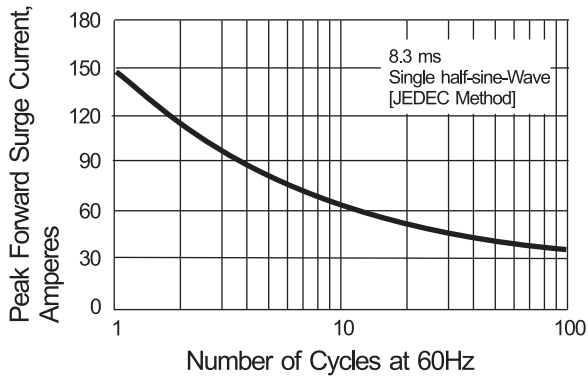


Fig. 5 Typical Reverse Characteristics

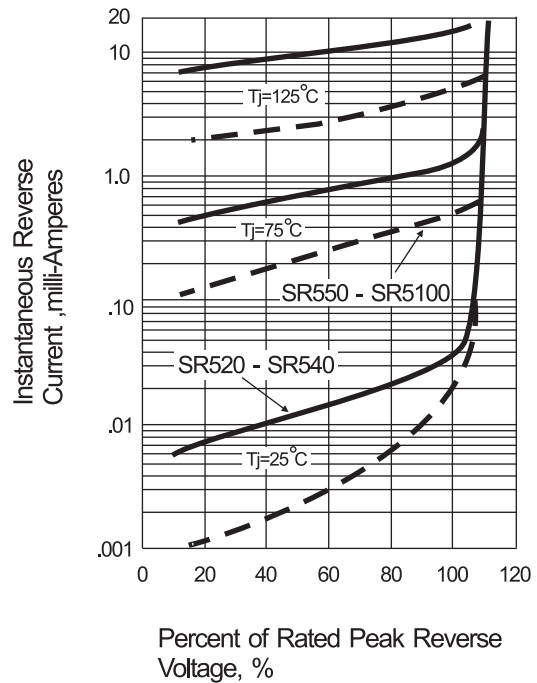


Fig. 4 Typical Junction Capacitance

