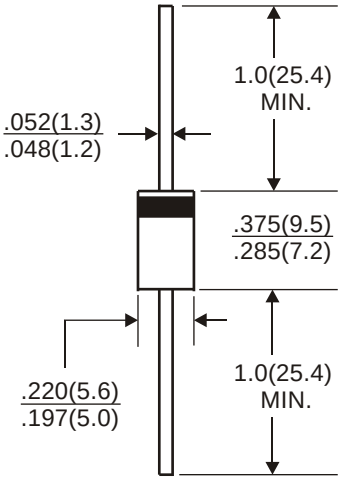
SEP ELECTRONIC CORP.

SR320 thru SR3100

3.0 A Schottky Barrier Rectifier

Rectifier Reverse Voltage 20 to 100V

DO-27



All dimensions inches and (millimeters)

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)

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	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	unit
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current 9.5 mm lead length (see fig.1)	$I_{F(AV)}$	3.0							A
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80							A
Typical thermal resistance	$R_{\theta JA}$	30							℃/W
Typical junction capacitance	C_j	250							pF
Operating junction temperature range	T_J	-55 to + 125			-55 to + 150				℃
Storage temperature range	T_{STG}	-55 to + 150							℃

Electrical Characteristics

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

Parameter	Symbol	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	Unit
Maximum instantaneous forward voltage drop at 3.0A	V_F	0.50			0.74		0.85		V
Maximum DC reverse current at rated T_A =25℃ DC blocking voltage per element T_A =100℃	I_R	3.0 30.0							mA

Rating and Characteristic Curves (TA = 25°C Unless otherwise noted)
SR320 thru SR3100

Fig. 1 Forward Current Derating Curve

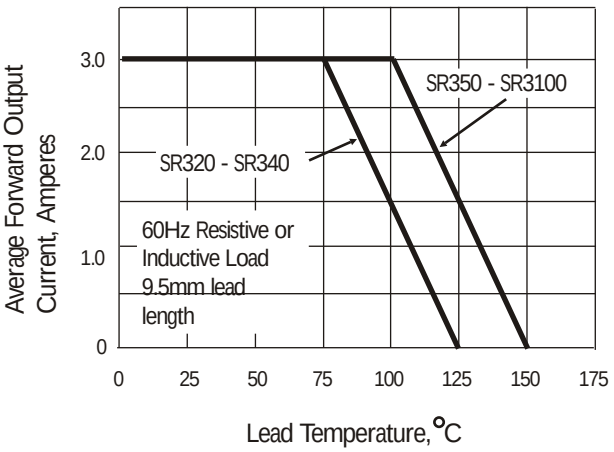


Fig. 2 Typical Instantaneous Forward Characteristics

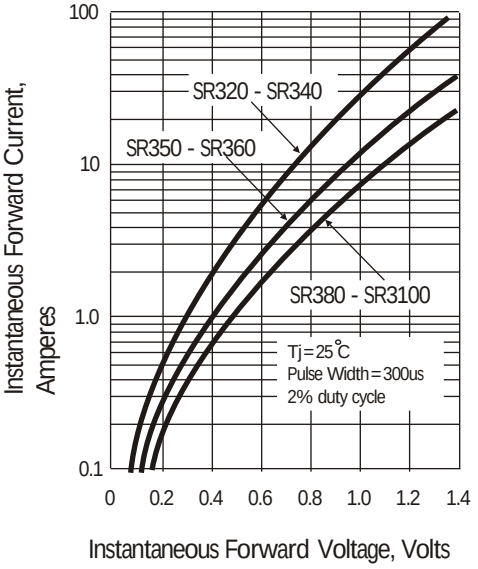


Fig. 3 Maximum Non-repetitive Forward Surge Current

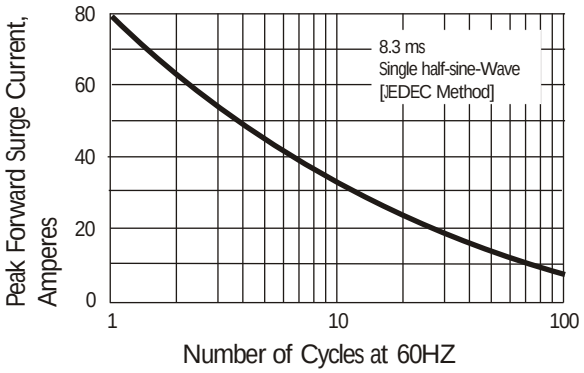


Fig. 4 Typical Junction Capacitance

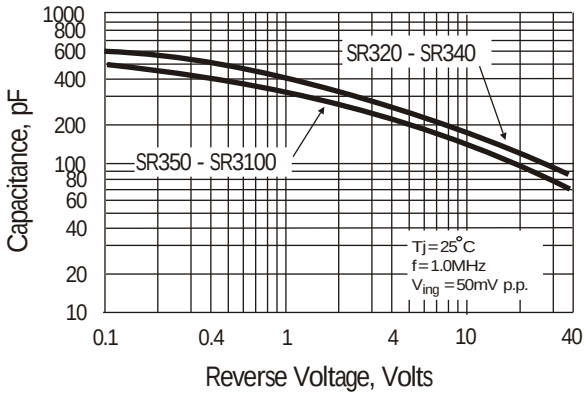


Fig. 5 Typical Reverse Characteristics