



YEA SHIN TECHNOLOGY CO., LTD

S34L THRU S320L

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

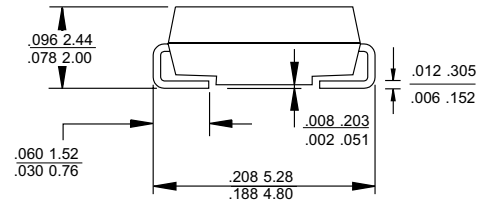
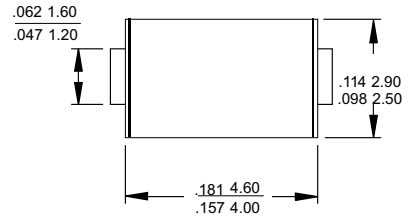


VOLTAGE - 40 to 200 Volts CURRENT - 3.0 Amperes

FEATURE

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 80A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

SMA/DO-214AC Unit:inch(mm)



MECHAINCAL DATA

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	S34L	S345L	S35L	S36L	S38L	S310L	S315L	S320L	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	32	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	100	150	200	V
Average Rectified Output Current @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Raged Load (JEDEC method)	I_{FSM}	80								A
Forward Voltage $I_F=3.0A$ (Note 1)	V_F	0.45		0.50		0.75		0.85		V
Maximum DC Reverse Current at $T_A=25^\circ\text{C}$	I_R	0.2				0.05				mA
at Raged DC Blocking Voltage $T_A=100^\circ\text{C}$		10				5				
I^2t Raging for Fusing ($t<8.3ms$)	I^2t	26.56								A^2S
Typical Junction Capacitance (Note2)	C_J	28								pF
Typical Thermal Resistance (Note3)	$R_{\theta JL}$	88								$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150								$^\circ\text{C}$

Note: 1.Pulse Test with PW=300us, 1% Duty Cycle.
2.Measured at 1.0MHz and Applied reverse Voltage of 4.0 Vdc.
3.Mounted on P.C.Board with 5.0 mm² (0.13mm thick) copper pad areas.

DEVICE CHARACTERISTICS

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Fig. 1 Forward Current Derating Curve

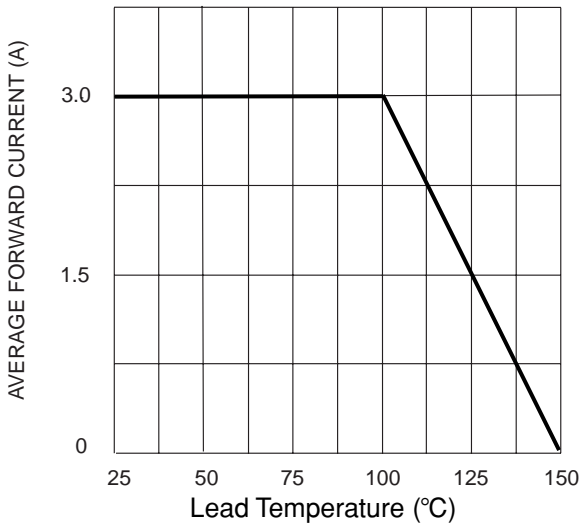


Fig. 2 Typ. Forward Characteristics

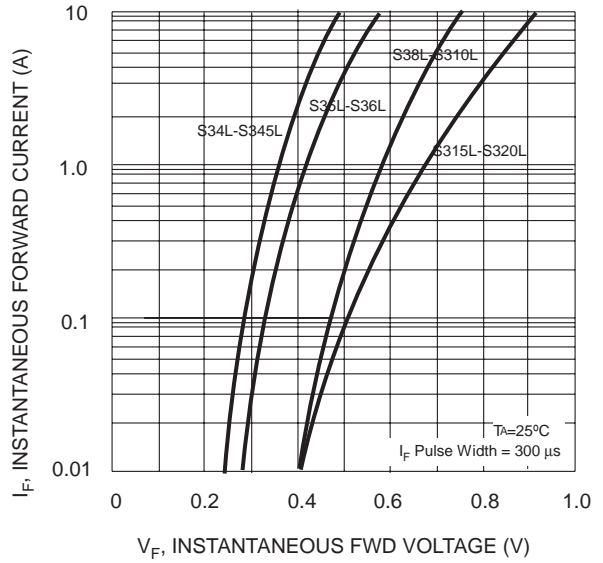


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

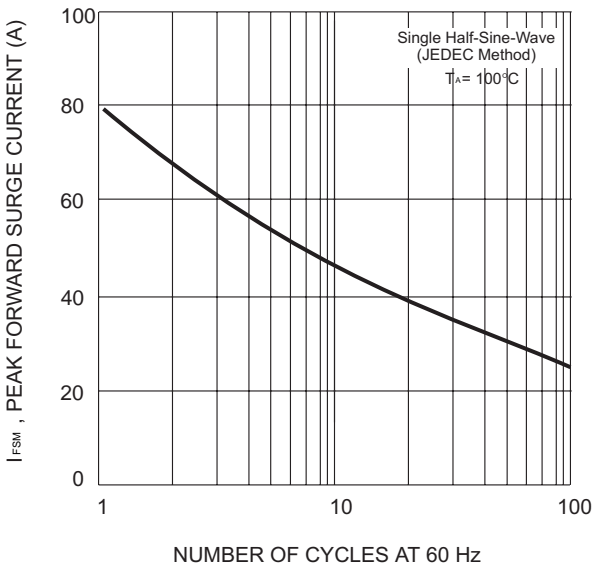


Fig. 4 T typical Reverse Characteristics (per element)

