



YEA SHIN TECHNOLOGY CO., LTD

SS14L THRU SS120L

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



VOLTAGE - 40 to 200 Volts CURRENT - 1.0 Ampere

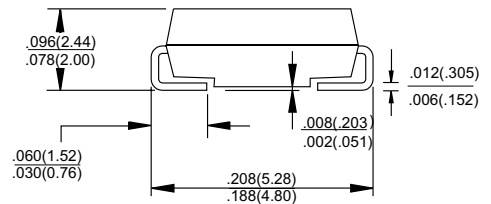
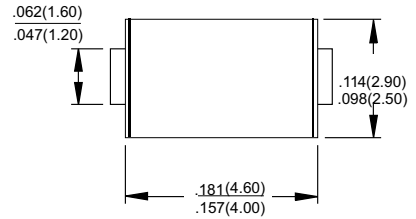
SMA/DO-214AC Unit:inch(mm)

FEATURES

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 35A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

MECHANICAL DATA

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band denotes 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%

Type Number	SYMBOL	SS14L	SS145L	SS15L	SS16L	SS18L	SS110L	SS115L	SS120L	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31	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 @ $T_L = 100^\circ C$	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35								A
Rating for fusing (t<8.3ms)	$I^2 t$	5.08								A ² s
Forward Voltage @ $I_F = 1.0A$	V_{FM}	0.45		0.55	0.75		0.85		V	
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	0.1				0.05				mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10				5				
Typical Junction Capacitance (Note 1)	C_J	90				60				pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	75								°C/W
Operating Temperature Range	T_J	-55 to +150								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Device mounted on FR-4 substrate, 1"*1", 2oz, single-sided, PC boards with 0.1"*0.15" copper pad.

DEVICE CHARACTERISTICS

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Fig. 1 Forward Current Derating Curve

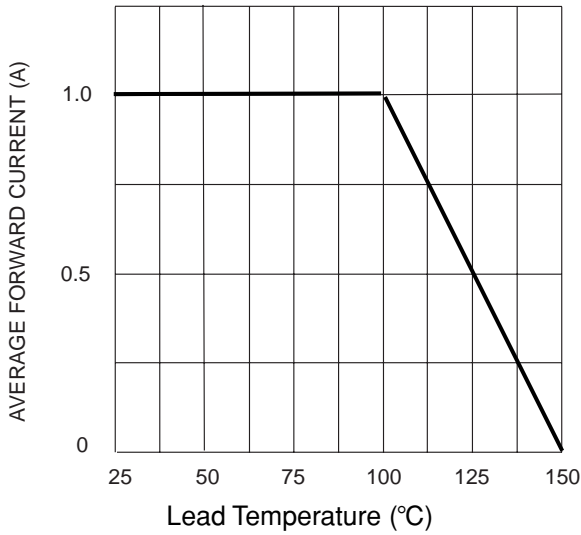


Fig. 2 Typ. Forward Characteristics

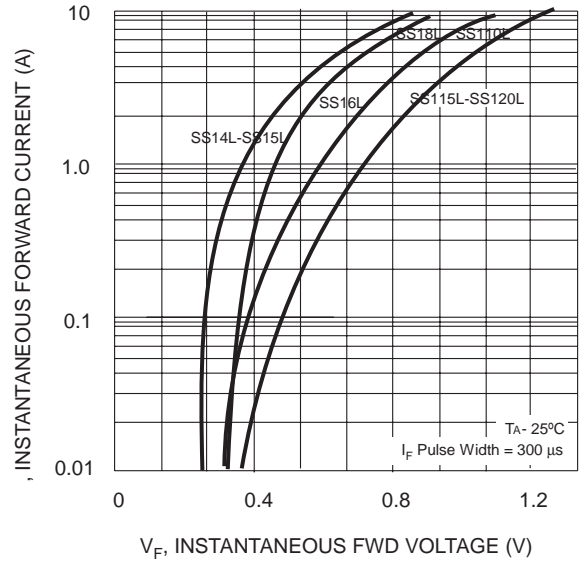


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

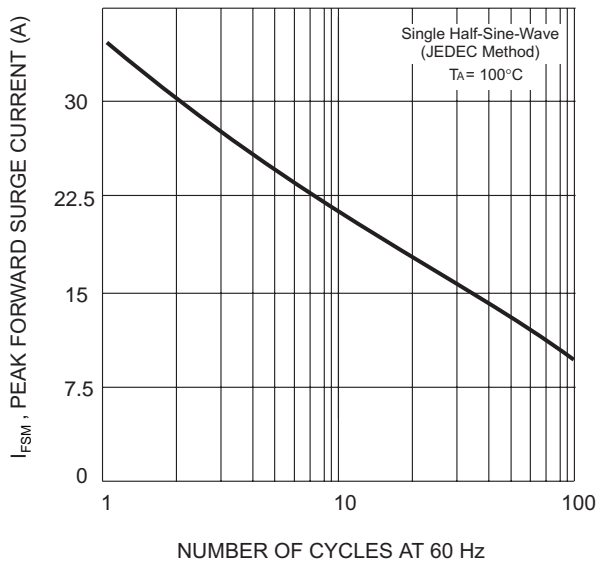
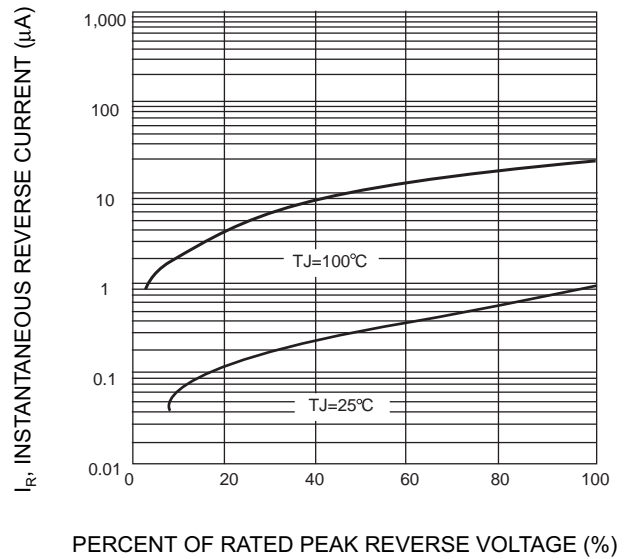


Fig. 4 Typical Reverse Characteristics (per element)



SMA PAD LAYOUT

