



SS54L THRU SS5200L

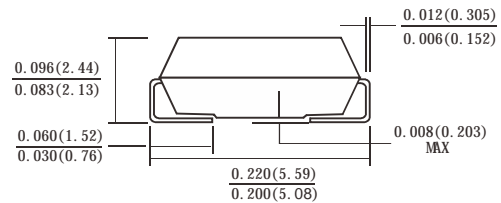
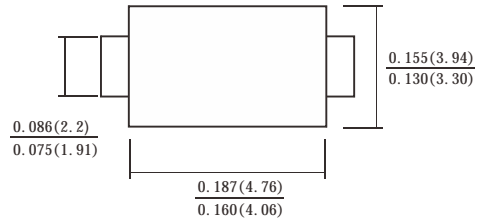
Surface Mount Low VF Schottky Rectifiers

Features

- Low profile package
- Ideal for automated placement
- Fast switching for high efficiency
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC



SMB(DO-214AA)



Dimensions in inches and (millimeters)

Mechanical Date

- **Case:** JEDEC DO-214AA molded plastic body
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end

Maximum Ratings and Electrical Characteristics Rating at 25 °C

ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number	SYMBOL	SS 54L	SS 545L	SS 55L	SS 56L	SS 58L	SS 510L	SS 5150L	SS 5200L	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	60	60	60	80	100	150	200	V
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_{F(AV)}$	5.0								A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	110								A
Rating for fusing ($t < 8.3ms$)	$I^2 t$	50.22								$A^2 s$
Forward Voltage @ $I_F = 5.0A$	V_{FM}	0.45		0.55	0.75		0.85		V	
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	0.2				0.1				mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10				5				
Typical Junction Capacitance (Note 1)	C_J	300				180				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88								$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150								$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150								$^\circ C$

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.



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

Fig. 1 Forward Current Derating Curve

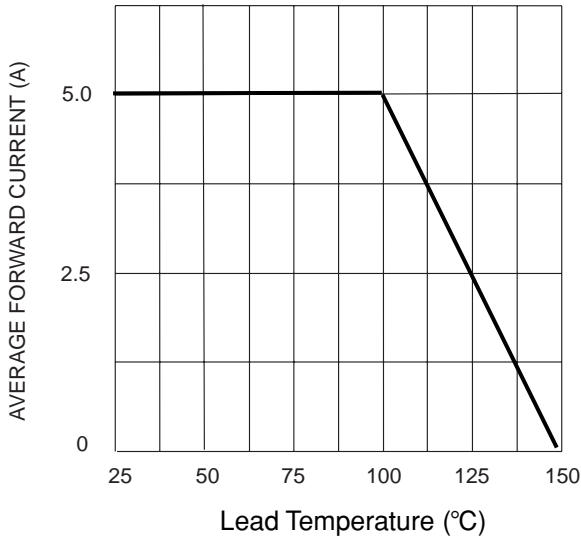


Fig. 2 Typ. Forward Characteristics

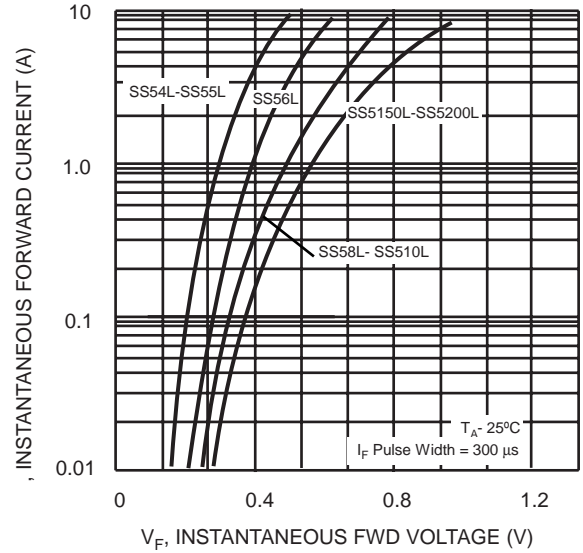


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

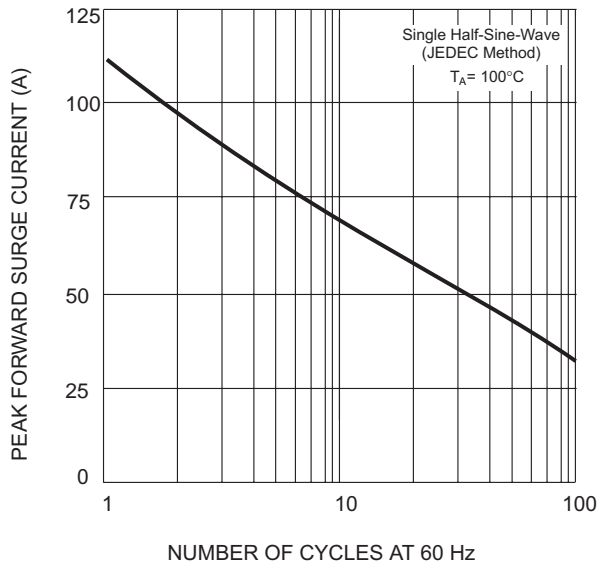
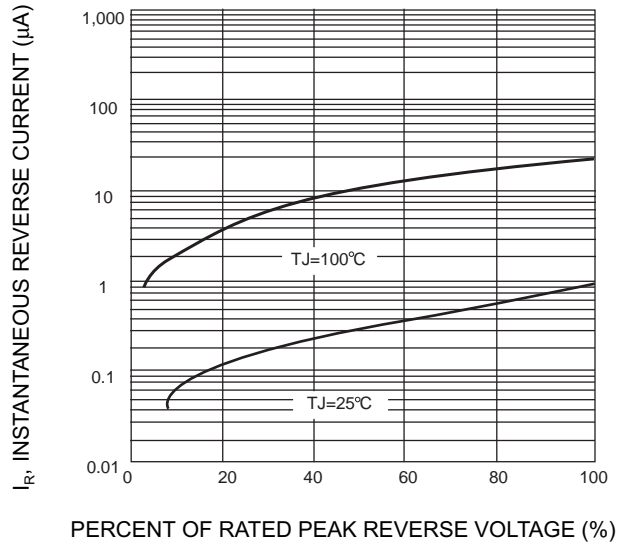


Fig. 4 Typical Reverse Characteristics (per element)



SMA PAD LAYOUT

