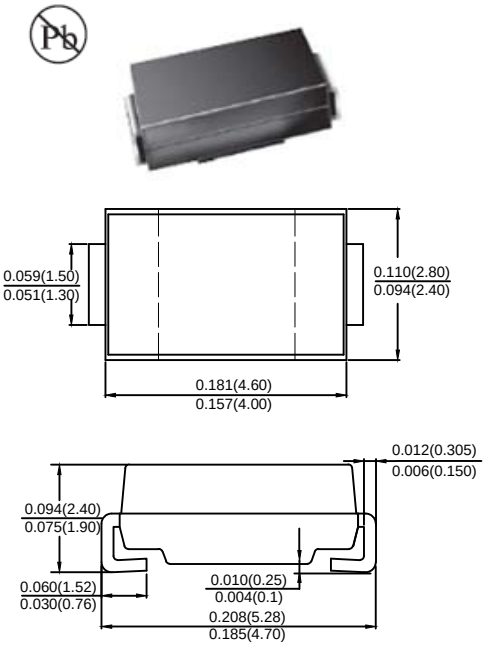
SS54L~SS5200L

Surface Mount Low VF Schottky Rectifiers

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering：
  260℃/10 seconds at terminals
- Component in accordance to
  RoHS 2002/95/1 and WEEE 2002/96/EC

SMA/DO-214AC



Dimensions in inches and (millimeters)

Mechanical Date

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

Maximum Ratings & Thermal Characteristics & Electrical Characteristics

(T_A = 25 °C unless otherwise noted)

Type Number	SYMBOL	SS 54L	SS 55L	SS 56L	SS 58L	SS 510L	SS 5150L	SS 5200L	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	60	80	100	150	200	V
Average Rectified Output Current @T_L =100℃	IF(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^2t	50.22							A^2s
Forward Voltage @IF=5.0A (Note1)	V_{FM}	0.45		0.55	0.75		0.85		V
Peak Reverse Current @T_A =25℃	I_R	0.2			0.1				mA
At Rated DC Blocking Voltage @T_A =100℃		10			5				
Typical Junction Capacitance	C_J	28							pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	88							℃/W
Operating Temperature Range	T_J	-55 to+150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1.Pulse Test with PW=300usec,1%Duty Cycle.
2.Mounted on P.C.Board with 5.0 mm²（0.13mm thick）copper pad areas.

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig. 1 Forward Current Derating Curve

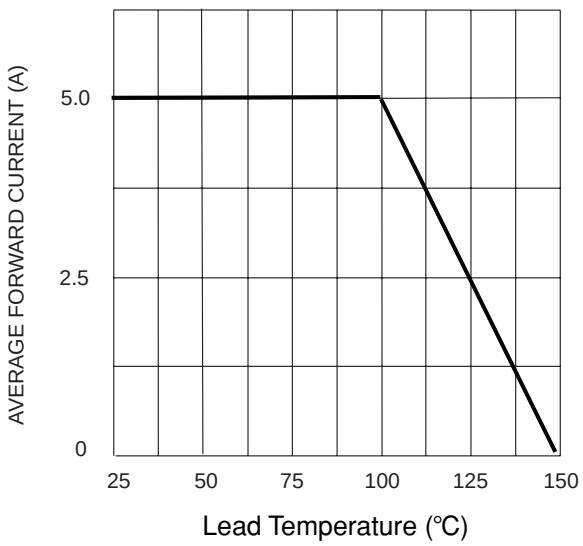


Fig. 2 Typ. Forward Characteristics

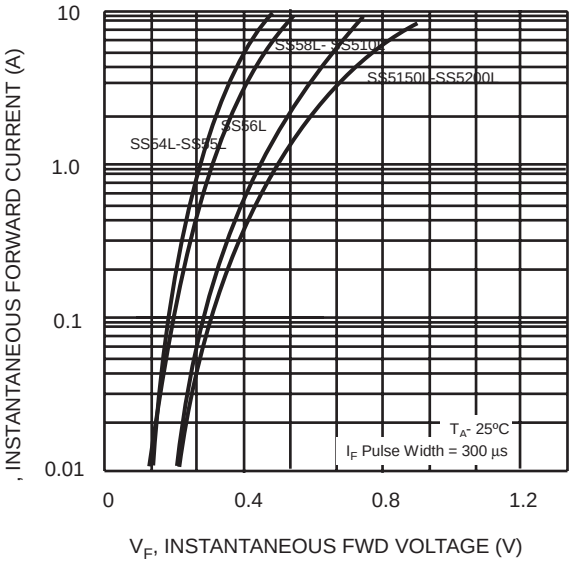


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

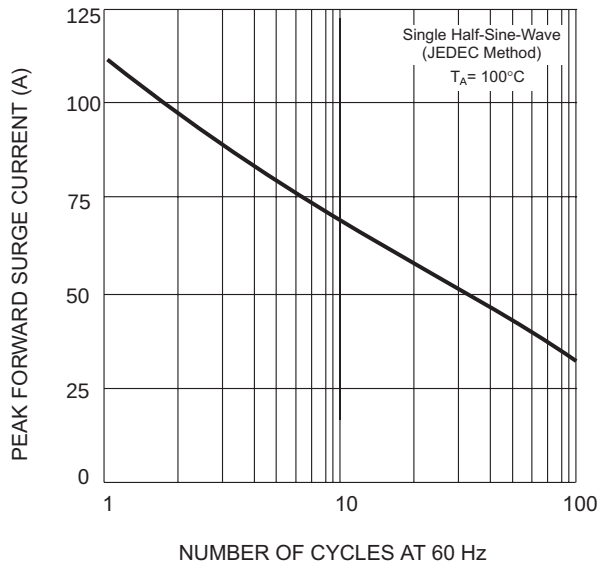
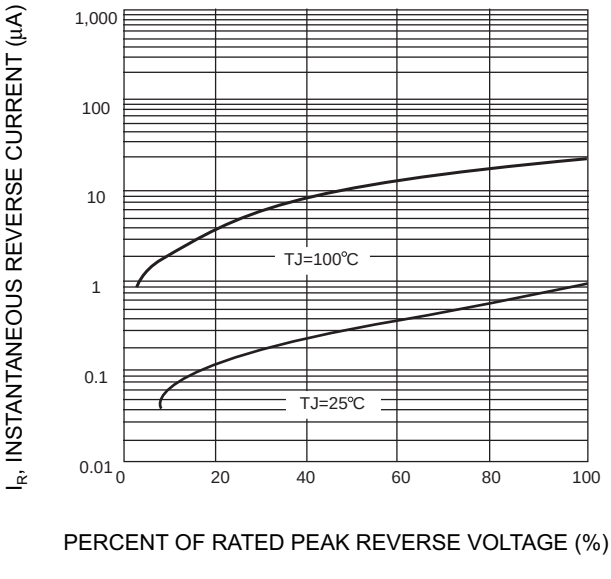
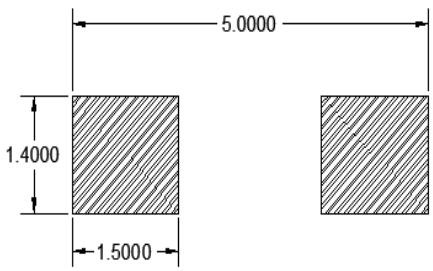


Fig. 4 T ypical Reverse Characteristics (per element)



SMA PAD LAYOUT