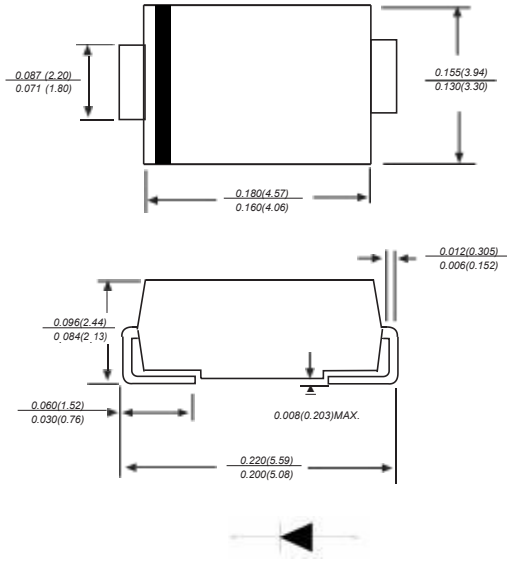
SS54L-SS510L

5.0Amp Surface Mounted Schottky Barrier Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Built-in strain relief,ideal for automated placement
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
  250 C/10 seconds at terminals

DO-214AA/SMB



Dimensions in inches and (millimeters)

Mechanical Data

Case : Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.0035 ounce, 0.098 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25 C ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS54L	SS545L	SS55L	SS56L	SS58L	SS510L	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	45	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	40	45	50	60	80	100	V
Maximum average forward rectified current at T_L=100° C	$I_{(AV)}$	5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120.0						A
Maximum instantaneous forward voltage at 5.0A	V_F	0.48			0.55	0.60		V
Maximum DC reverse current at rated DC blocking voltage T_A =25° C / T_A=100° C	I_R	0.5 50				0.2 20		mA
Typical thermal resistance	R_{qJA}	85.0						· C/W
Operating junction temperature range	T_J	-55 to +150						· C
Storage temperature range	T_{STG}	-55 to +150						· C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

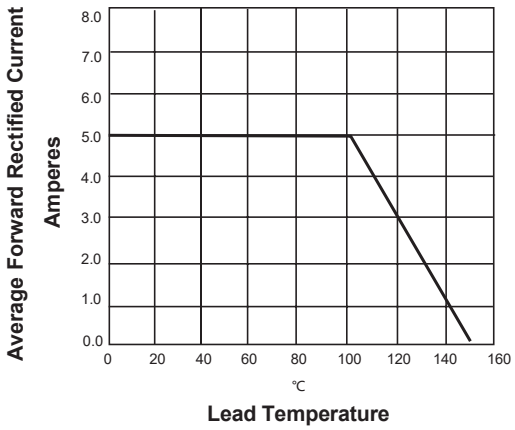


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

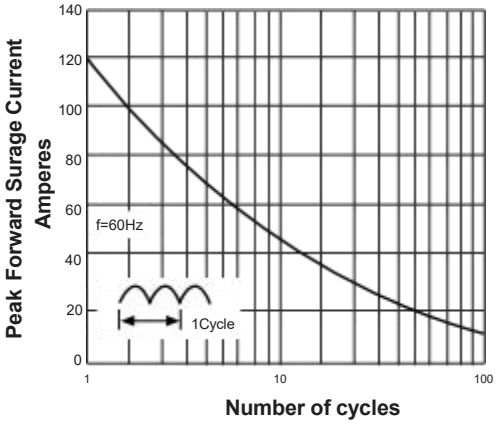


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

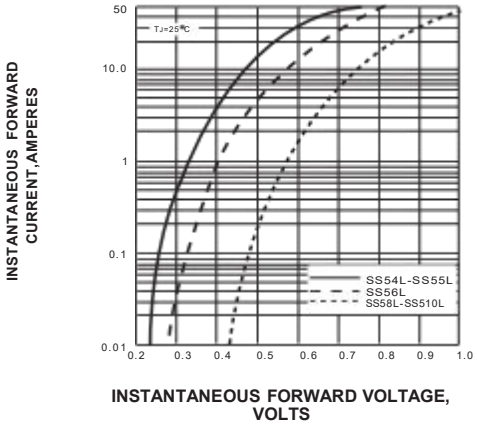
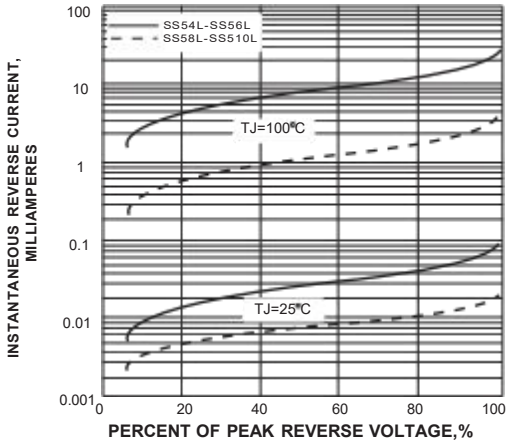
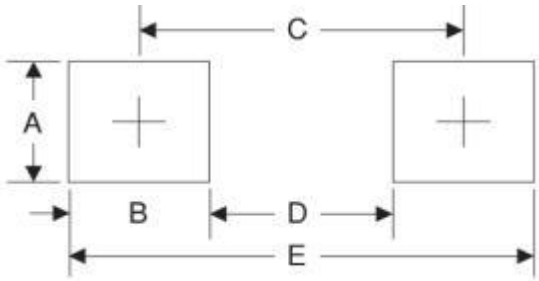


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

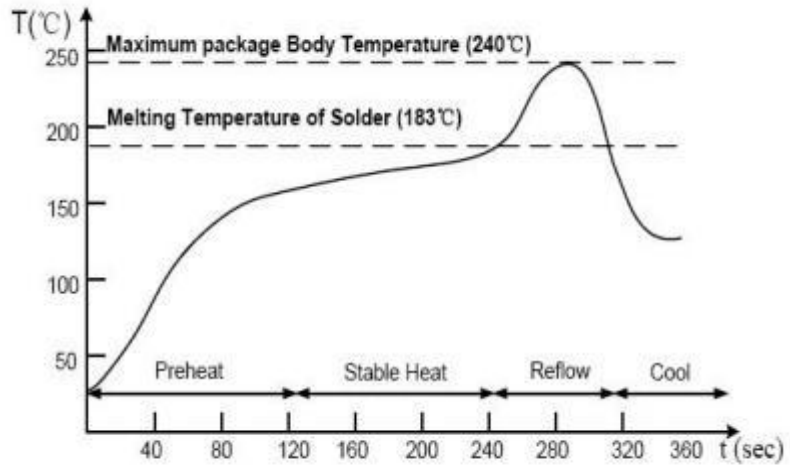


Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	2.30	0.091
B	2.00	0.078
C	4.10	0.161
D	2.10	0.083
E	6.10	0.240

Suggested Soldering Temperature Profile

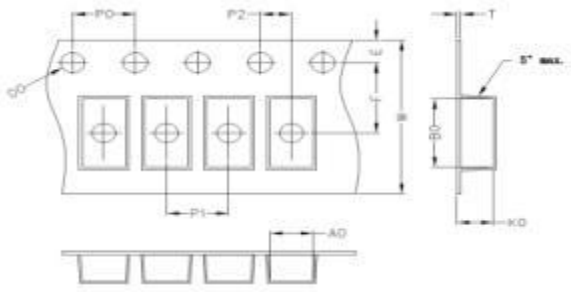


Note

- Recommended reflow methods: IR , vapor phase oven , hot air oven , wave solder .
- The device can be exposed to a maximum temperature of 265 °C for 10 seconds .
- Devices can be cleaned using standard industry methods and solvents .
- If reflow temperatures exceed the recommended profile , devices may not meet the performance requirements .

Package Information

Carrier Dimension(mm)



A0	B0	K0	D0	E	F
3.80	5.40	2.45	1.55	1.75	5.50
P0	**P1**	**P2**	**T**	**W**	**Tolerance**
4.0	8.0	2.0	0.25	12	0.1

Package Specifications

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
SMB	13'	330	3.0	340	6.0	360*360*360	48