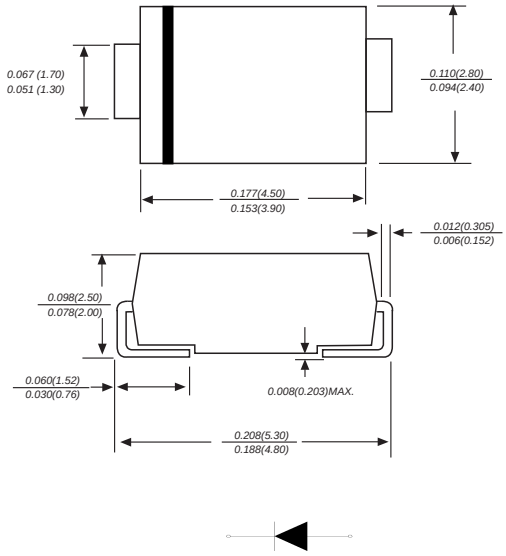
SS12~SS120

1.0Amp 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℃/10 seconds at terminals

DO-214AC/SMA



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 : 0.0023 ounce, 0.07 grams

Maximum Ratings And Electrical Characteristics

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

Parameter	SYMBOLS	SS12	SS14	SS145	SS16	SS18	SS110	SS115	SS120	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	45	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	31.5	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	45	60	80	100	150	200	V
Maximum average forward rectified current at T_L=100℃	$I_{(AV)}$	1.0								A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0								A
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70	0.85		0.95		V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	0.5 50				0.05 10				mA
Typical thermal resistance	R_{qJA}	80.0								°C/W
Operating junction temperature range	T_J	-55 to +125				-55 to +150				°C
Storage temperature range	T_{STG}	-55 to +150								°C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

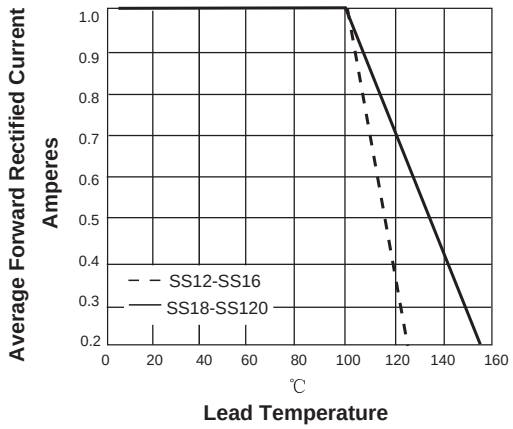


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

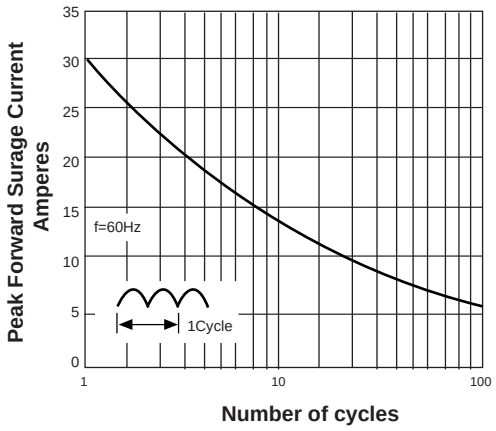


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

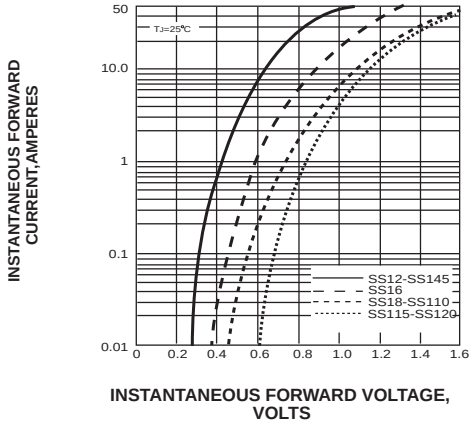
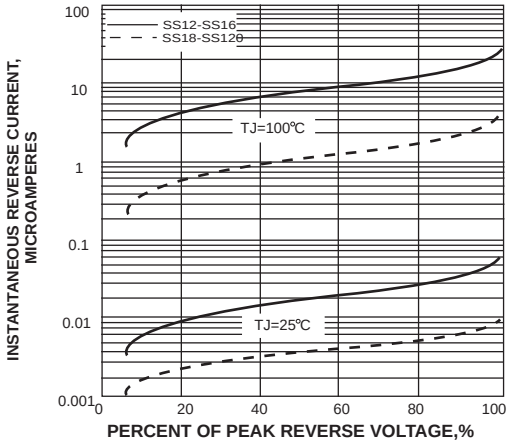
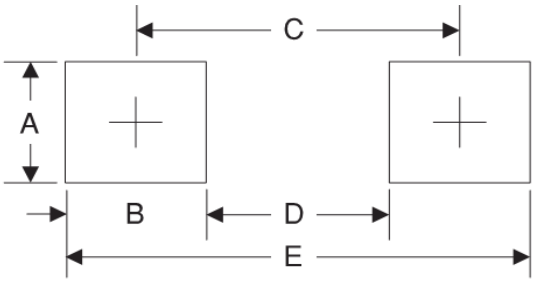


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

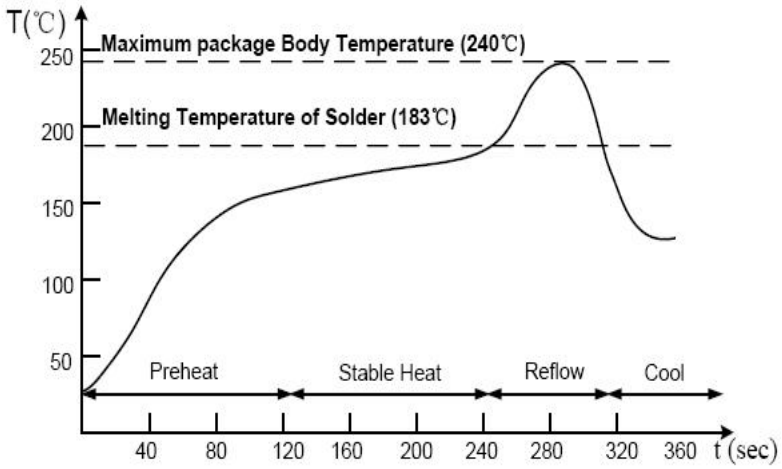


Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215

Suggested Soldering Temperature Profile

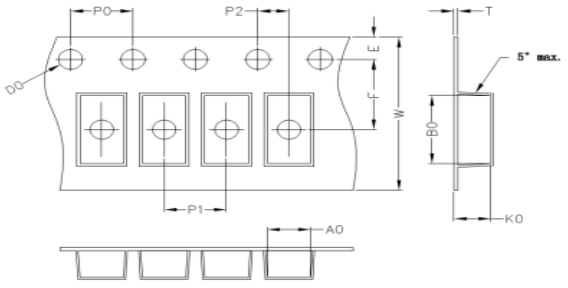


Note

- 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
2.80	5.30	2.36	1.55	1.75	5.50
P0	**P1**	**P2**	**T**	**W**	**Tolerance**
4.0	4.0	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)
SMA	11'	278	5	285	10	355*310*310	80
	13'	330	7.5	340	15	360*360*360	120