

1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

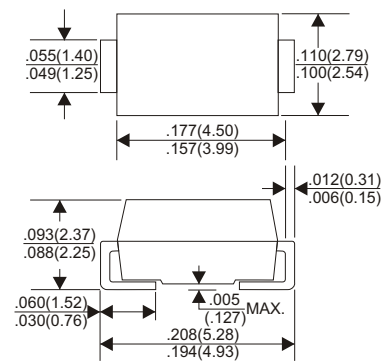
Features:

- * Electrostatic discharge (ESD) test under IEC6100-4-2 standard >16KV(SK12A~SK16A). standard >10KV(SK110A~SK120A).
- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

Mechanical Data:

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.063 grams
- * Both normal and Pb free product are available:
- * Normal: 80~95%Sn, 5~20%Pb
- * Pb free: 99 Sn above can meet Rohs environment substance directive request

DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	SK12	SK14	SK16	SK18	SK110	SK115	SK120	UNITS
Marking Code	SK12 SS12	SK14 SS14	SK16 SS16	SK18 SS18	SK110 SS110	SK115 SS115	SK120 SS120	-
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	0.50	0.65	0.8					V
Maximum DC Reverse Current Ta=25°C	0.3							mA
at Rated DC Blocking Voltage Ta=100°C	8							mA
Typical Junction Capacitance (Note1)	110							pF
Typical Thermal Resistance R _{JA} (Note 2)	50							°C/W
Operating Temperature Range T _J	-65 — +150							°C
Storage Temperature Range T _{STG}	-65 — +150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.
2. Thermal Resistance Junction to Ambient

RATING AND CHARACTERISTIC CURVES (SK12 THRU SK120)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

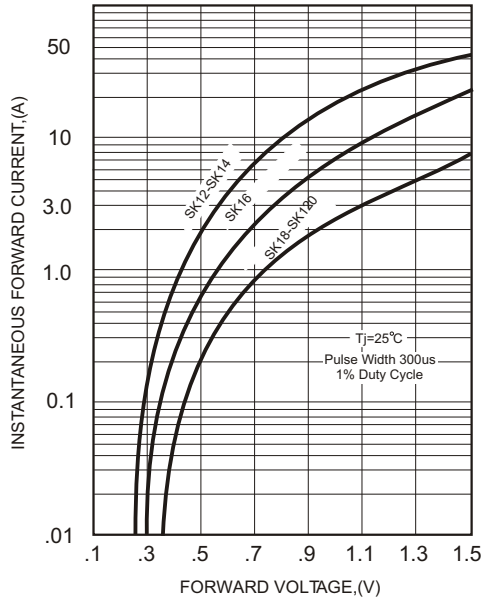


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

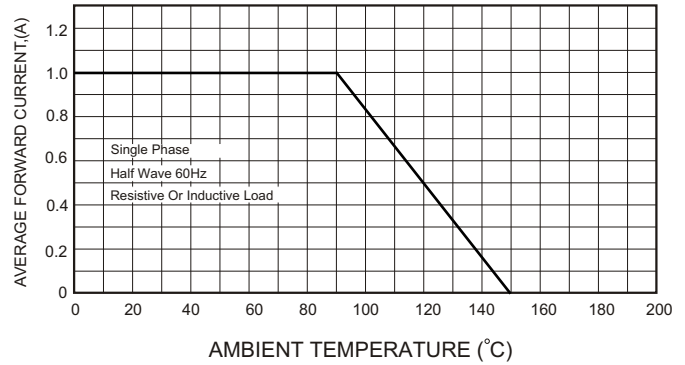


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

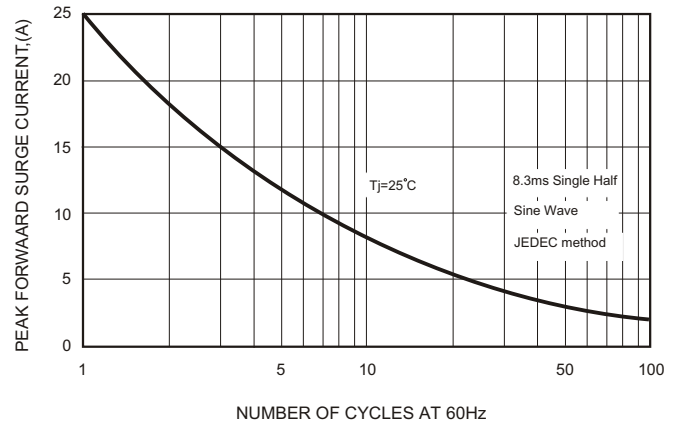


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

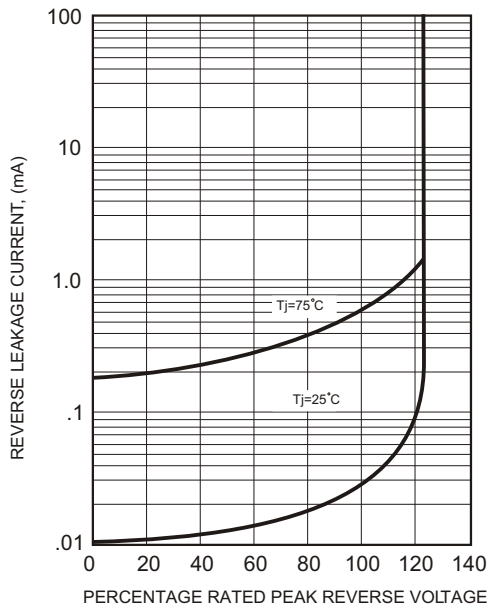
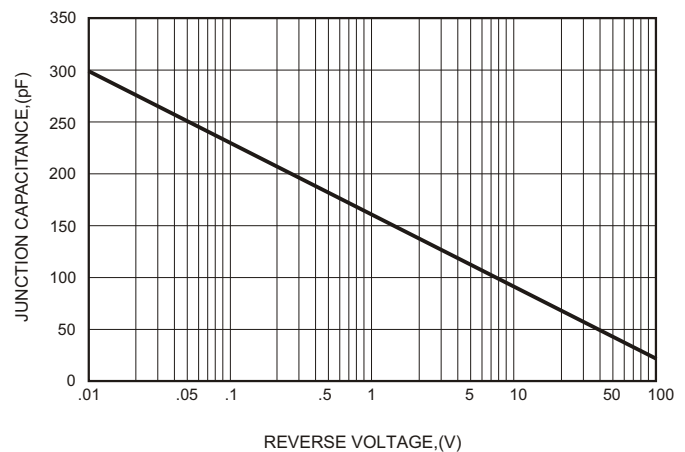
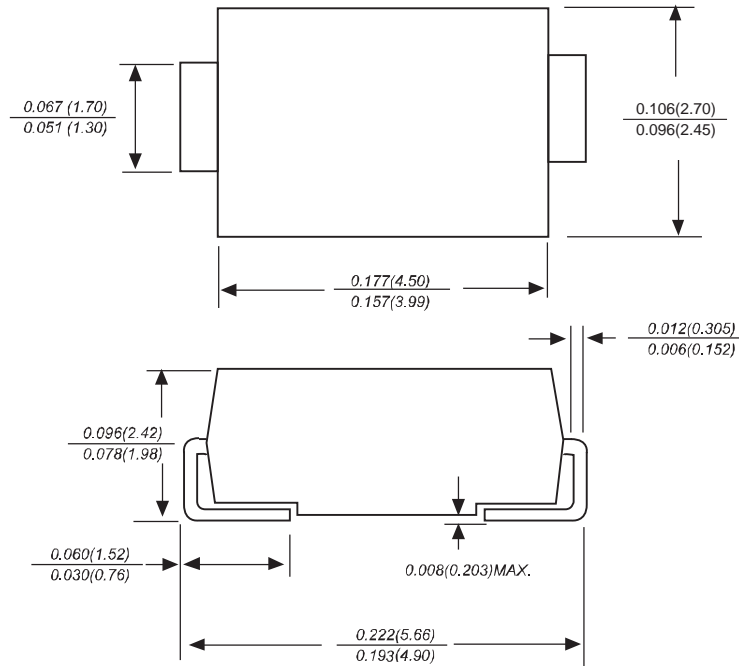


FIG.5-TYPICAL JUNCTION CAPACITANCE

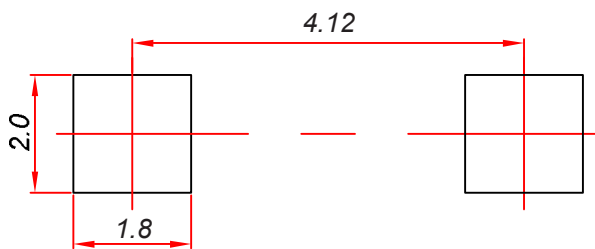


SMA Package Outline Dimensions



Dimensions in inches and (millimeters)

SMA Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Reel Taping Specifications For Surface Mount Devices-SMA

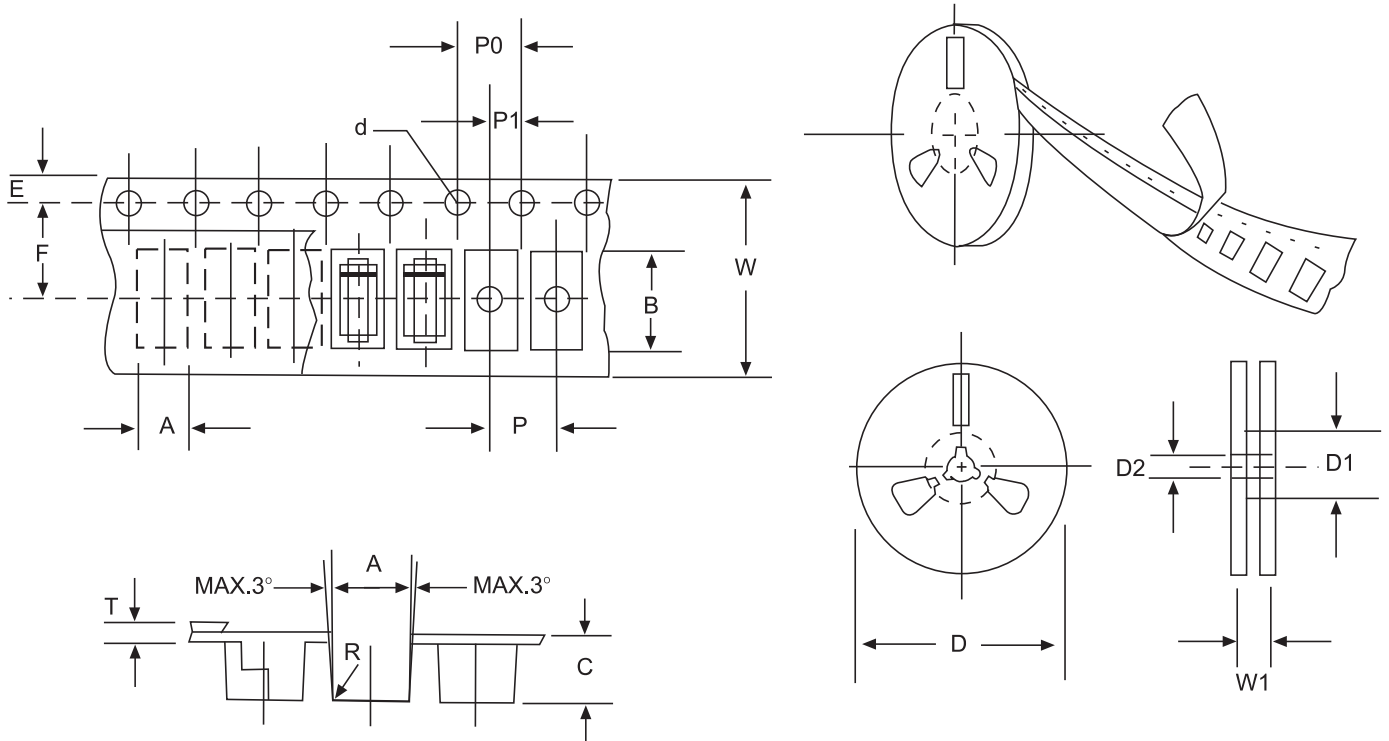


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SMA mm(inch)
Carrier width	A	2.79±0.1(0.110±0.004)
Carrier length	B	5.33±0.1(0.210±0.004)
Carrier depth	C	2.36±0.1(0.093±0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	279±2.0 (11± 0.079)
Reel inner diameter	D1	75±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Strocket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	5.5±0.05(0.217±0.002)
Punch hole pitch	P	4.0±0.1(0.157±0.004)
Sprocket hole pitch	P0	4.0±0.1(0.157±0.004)
Embossment center	P1	2.0±0.1(0.079±0.004)
Total tape thickness	T	0.28±0.02(0.011 ±0.0008)
Tape width	W	12.0±0.2(0.472±0.008)
Reel width	W1	16.8±2.0(0.661±0.079)

NOTE:Devices are packed in accordance with EIA standard RS-481-A and specification given above.