

1 AMPERES SCHOTTKY BARRIER RECTIFIERS 【SK1XA Series】

VOLTAGE : 20 to 100 Volts

CURRENT : 1 Amperes

FEATURES

Plastic Package Has Underwriters Laboratory Flammability Classification 94V-0 Metal Silicon Junction.

- Low Profile Surface Mount Package
- Built-In Strain Relief
- Low Power Loss, High Efficiency
- Guarding For Over voltage Protection
- For Use In Low Voltage, High Frequency Inverters, Free Wheeling, And Polarity Protection Applications

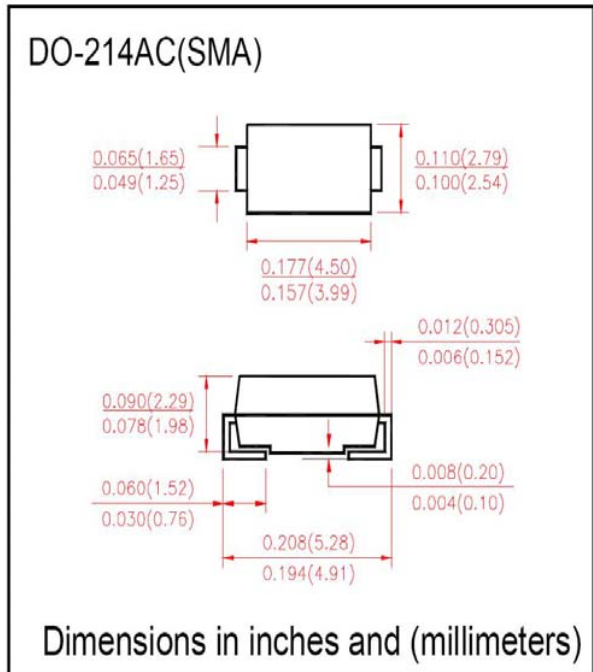
MECHANICAL DATA

Case : SMA Molded Plastic Body

Terminals : Lead Solderable Per MIL-STD-750, Method 2026

Polarity : Color Band Denotes Cathode End

Weight : 0.002 ounce, 0.064 gram



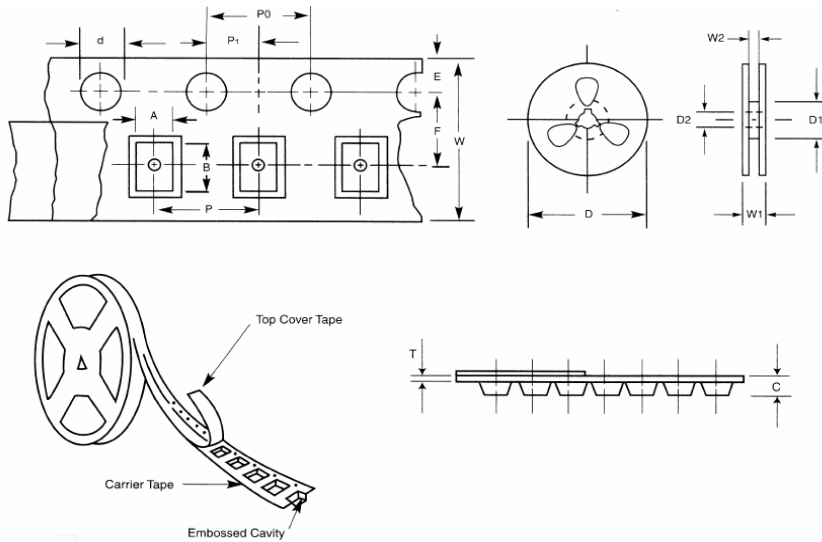
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbol	SK12A	SK14A	SK16A	SK18A	SK110A	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	V
Working Peak Reverse Voltage	V_{RWM}	20	40	60	80	100	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	V
Maximum Average Forward Current	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) per leg	I_{FSM}	30					A
Operating Junction Temperature Range	T_J	-55 to +125					°C
Storage Temperature Range	T_{STG}	-55 to +125					°C
Maximum Forward Voltage per leg ($T_J=25^\circ\text{C}$)	V_F	0.50	0.52	0.73	0.81	0.81	V
Maximum DC Reverse Current at Rated DC Blocking Voltage(AT $V_R=V_{RRM}$)	$T_J=25^\circ\text{C}$	0.5					mA
	$T_J=125^\circ\text{C}$	20					
Typical Junction Capacitance	C_J	88					PF
Typical Thermal Resistance	$R_{\theta JC}$	28					°C/W

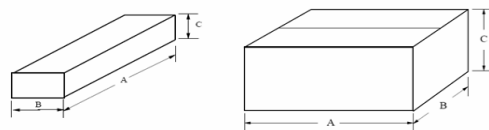
Reel Taping Specification For Surface Mount Devices



Reel Dimensions

Item	Symbol	SMA
Carrier width	A	2.7 (max)
Carrier length	B	5.3 (max)
Carrier depth	C	2.66 (max)
Sprocket hole	d	1.5±0.1 DIA
Reel outside diameter	D	178±2.0 / 330±2
Reel inner diameter	D1	50 min
Feed hole diameter	D2	13.5±1
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.05
Punch hole pitch	P	4.0±0.1
Sprocket hole pitch	Po	4.0±0.1
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.6 max
Tape width	W	12.0±0.3
Reel width	W1	18.4 (max)
Reed width	W2	14.4 (max)

Packaging Specification



Device Type	Reel (EA)	Reel Dia(mm)	Carton Size(mm)	Carton (EA)	Approx. Gross Weight (KG)
SMA-7"	1,500	178	370 x 210 x 355	60,000	8.3
SMA-13"	5,000	330	370 x 210 x 355	50,000	8.3