

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 150 to 200 Volts Forward Current - 3.0 Amperes

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds,0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

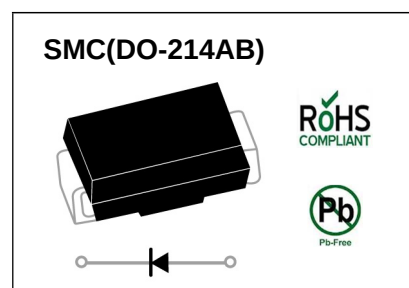
- Case: DO-214AB molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.007 ounce, 0.25 grams

Specification

Maximum Rating 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%.



	SYMBOLS	SS315C	SS320C	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	150	200	V
Maximum RMS voltage	V _{RMS}	105	140	V
Maximum DC blocking voltage	V _{DC}	150	200	V
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	3.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100.0		A
Maximum instantaneous forward voltage at 3.0A	V _F	0.85	0.95	V
Maximum DC reverse current T _A =25°C	I _R	0.1		mA
at rated DC blocking voltage T _A =100°C		2.0		
Typical junction capacitance (NOTE 1)	C _J	200		pF
Typical thermal resistance (NOTE 2)	R _{θJA}	55.0		°C/W
Operating junction temperature range	T _J	-55 to +150		°C
Storage temperature range	T _{STG}	-55 to +150		°C

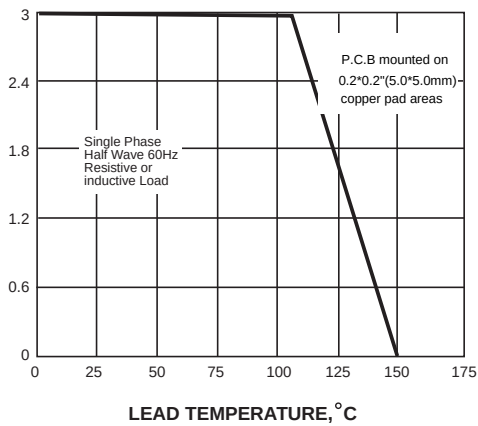
Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient,

Ratings and characteristic curves SS315C thru SS320C

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,
AMPERES

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

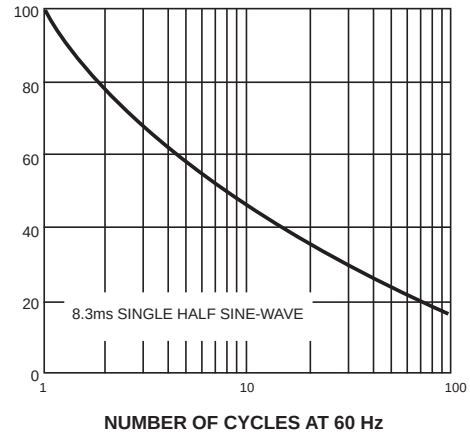


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

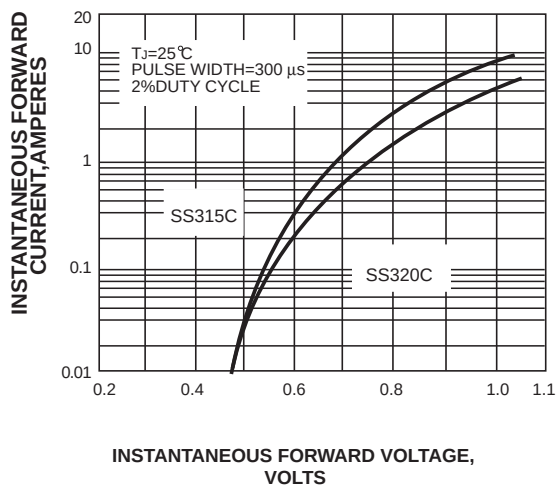


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

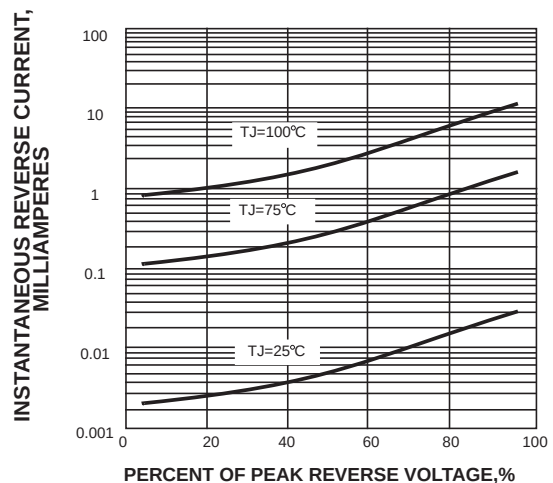


FIG. 5-TYPICAL JUNCTION CAPACITANCE

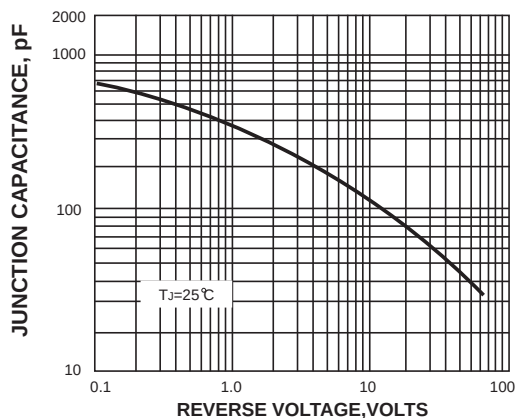
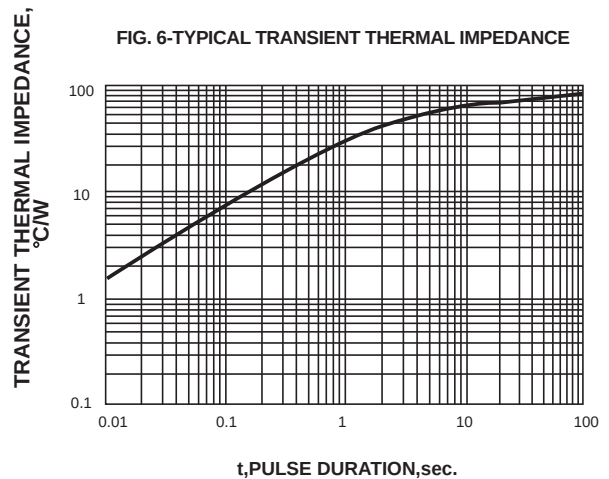


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



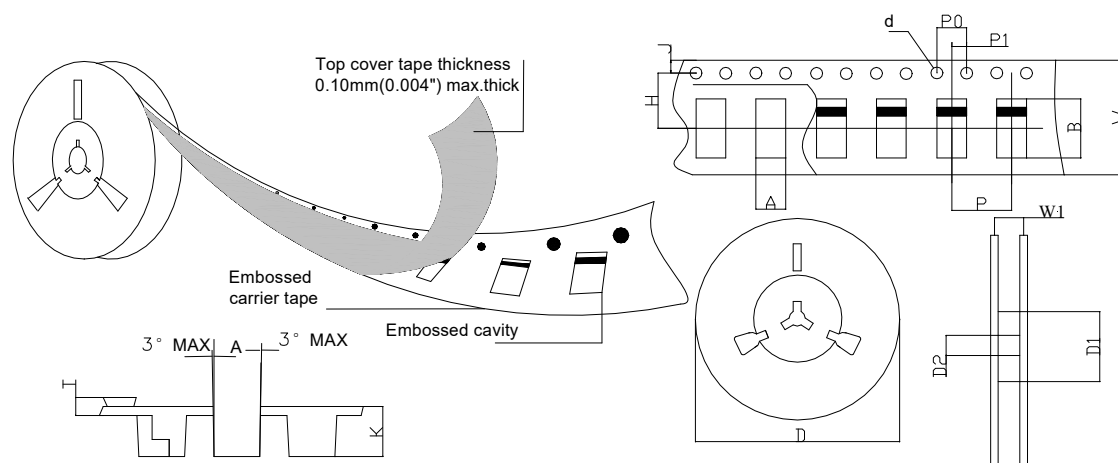
Marking and packing illustration

1、Marking



SYMBOL	Explanation
A	Product Name

2、Packaging



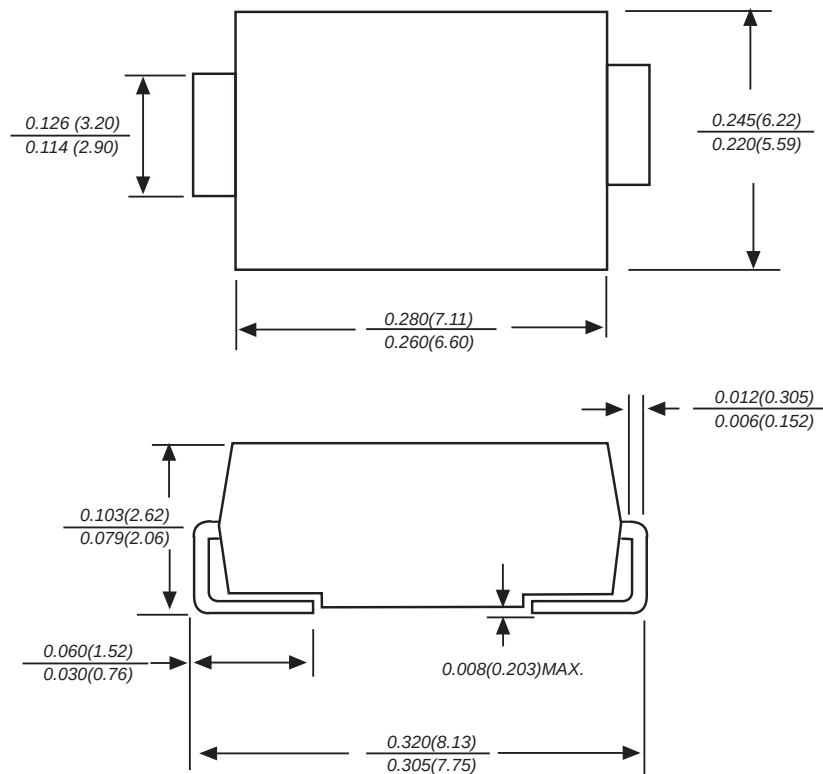
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	SMC (DO-214AB)	ITEM	SYM BOL	SMC (DO-214AB)
Carrier width	A	6.15(0.242)Max	Carrier depth	K	2.54(0.100)Typ
Carrier length	B	8.41(0.331)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	74.0(2.913)Min	Overall tape thickness	T	0.25(0.010)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	16.0(0.430)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	16.5(0.650)Min
Punch hole position	H	7.50(0.295)Typ			

3、Ordering Information

Part Number	Compliance	Case	Packaging
SSXX	Standard	SMC	3000/Tape & Reel

Dimension

SMC(DO-214AB)



Dimensions in inches and (millimeters)

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