

SS12 THRU SS120

1.0AMP. SCHOTTKY BARRIER RECTIFIERS

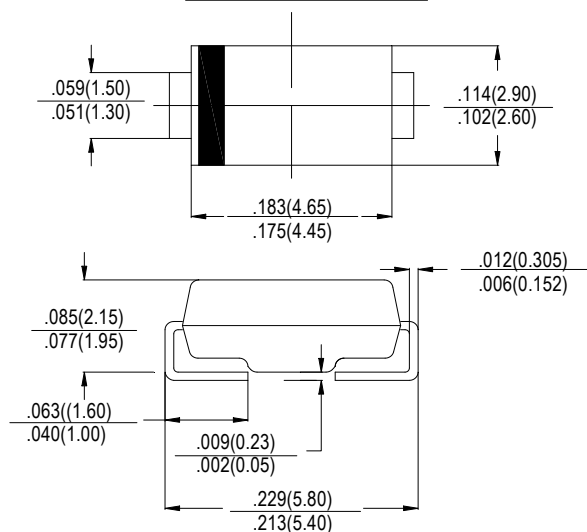
FEATURE

- For surface mounted application
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge current capability
- High temperature soldering guaranteed
260°C/10 seconds at terminals.

MECHANICAL DATA

- Terminal: Solder plated
- Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
- Polarity: color band denotes cathode
- Packaging: 12mm tape per EIA STD RS-481

SMA(DO-214AC)



Dimensions in inches and (millimeters)

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, derate current by 20%

Type Number	SYM BOL	SS 12	SS 14	SS 16	SS 110	SS 115	SS 120	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	70	105	140	V
Maximum DC blocking Voltage	V_{DC}	20	40	60	100	150	200	V
Maximum Average Forward Rectified Current at T _L =90°C	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0						A
Maximum Forward Voltage at 1.0A DC	V_F	0.55		0.70	0.85	0.95		V
Maximum DC Reverse Current @T _j =25°C at rated DC blocking voltage @T _j =100°C	I_R	0.5			0.2			mA
		20.0			10.0			
Typical Junction Capacitance(Note1)	C_J	60		45	30	20		pF
Typical Thermal Resistance(Note2)	$R_{(JA)}$	75						°C/W
	$R_{(JC)}$	25						
Storage Temperature	T_{STG}	-55+150						°C
Operating Junction Temperature	T_J	-55 to +125		-55 to +150				°C

Note:

- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Measured on P.C.Board with 0.2×0.2”(5.0×5.0mm)Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES (SS12 THRU SS120)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

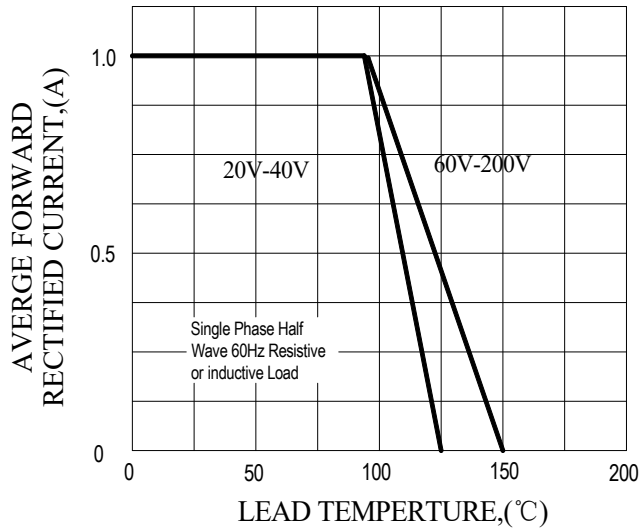


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

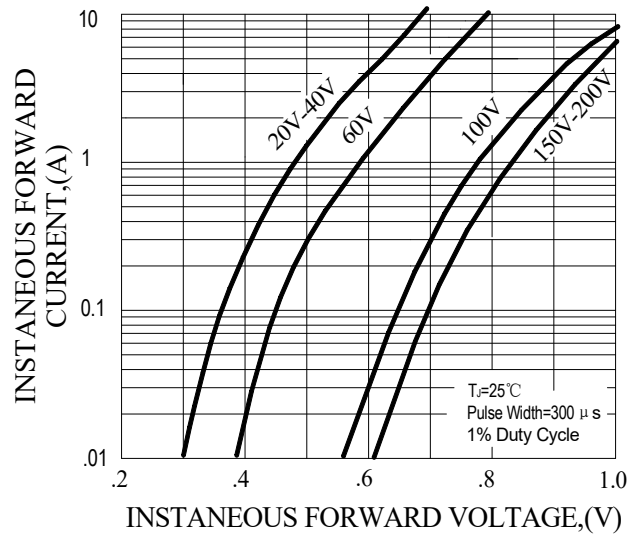


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

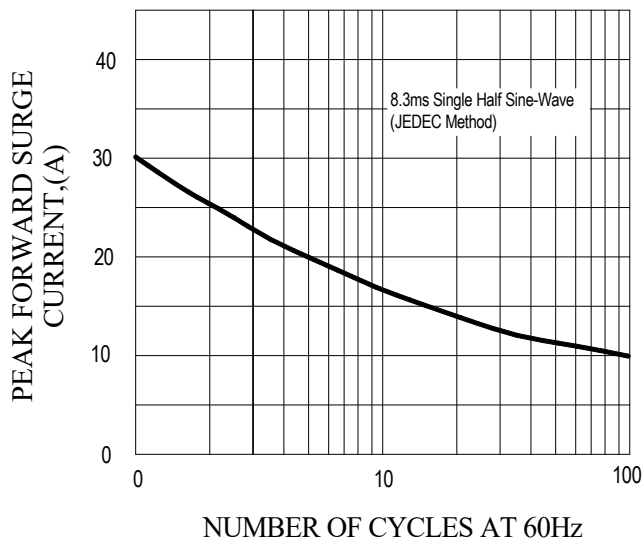
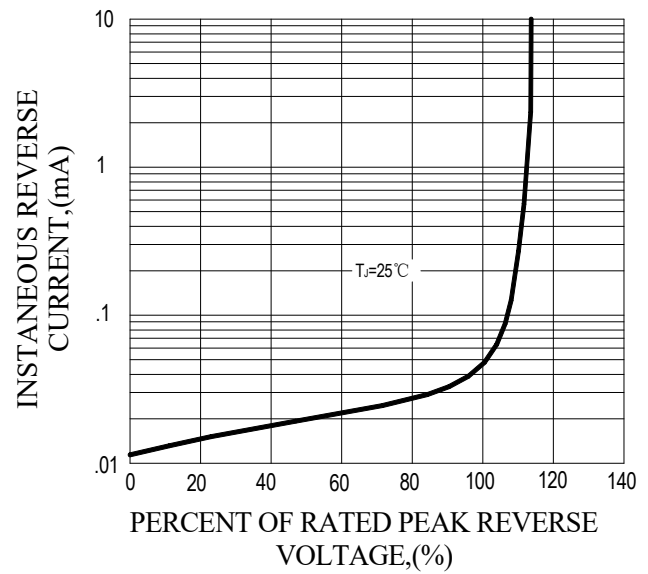
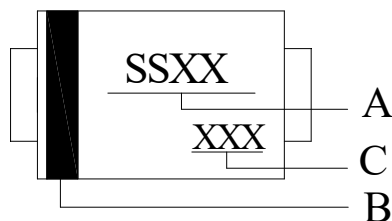


FIG.4-TYPICAL REVERSE CHARACTERISTICS



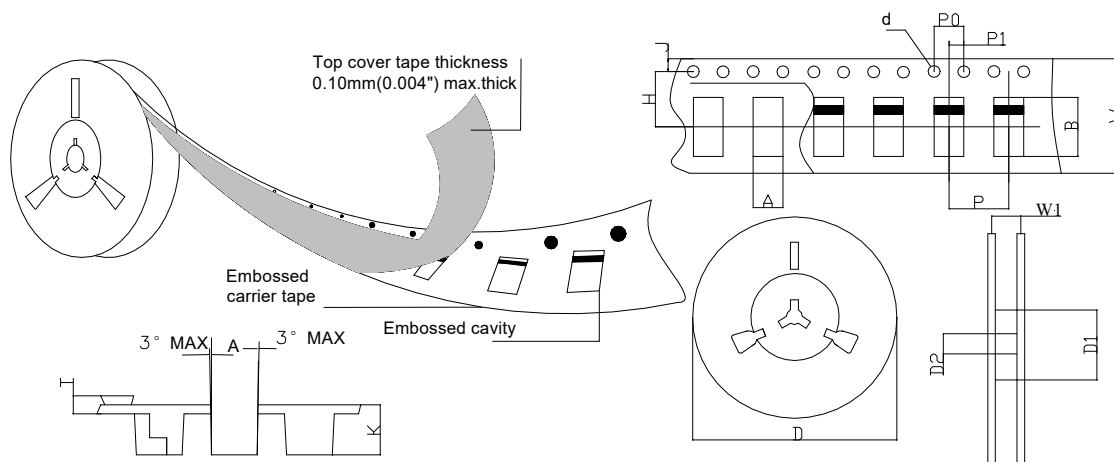
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name(X=12,14,16,110,115,120)
C	Date Code

2、Packaging



SPECIFICATIONS mm(inch)			SPECIFICATIONS mm(inch)		
ITEM	SYM BOL	PACKAGE SMA(DO-214 AC)	ITEM	SYM BOL	PACKAGE SMA(DO-214A C)
Carrier width	A	3.17(0.125)Max	Carrier depth	K	2.42(0.095)Typ
Carrier length	B	5.81(0.229)Max	Punch hole pitch	P	4.00(0.157)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)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.55(0.219)Typ			