



# SM320A thru SM3200A



## Schottky Barrier Rectifiers



**DO-214AC(SMA)**

### Primary Characteristics

$I_F$	3	A
$V_{RRM}$	20~200	V
$I_{FSM}$	80	A
$V_F$	0.50, 0.7, 0.85, 0.87, 0.90	V
$T_J$ max	125, 150	°C

### Features

- High current capability
- High surge current capability
- Low reverse current

### Mechanical Data

- Case : DO-214AC(SMA)
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead free Plating (Tin Finish)  
Solderable per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight: 0.062 grams (approximate)

### Ordering Information

Part No.	Remark	Package	Packing
SM3xxA	RoHS Compliant	SMA	5000 / Tape & Reel
SM3xxA-H	Halogen Free		
SM3xxA-Q	AEC-Q101 qualified		

### Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	SM 320A	SM 330A	SM 340A	SM 350A	SM 360A	SM 380A	SM 3100A	SM 3150A	SM 3200A	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_F$	3									A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	80									A
Maximum Instantaneous Forward Voltage IF=3A @ 25°C	$V_F$	0.50			0.70		0.85		0.87	0.90	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	$I_R$	0.5 10					0.2 5.0				mA
Typical Junction Capacitance(NOTE1)	$C_j$	150					100		80		pF
Typical Thermal Resistance	$R_{\theta JC}$	25									°C/W
Operating Temperature Range	$T_J$	-55 to +125					-55 to +150				°C
Storage Temperature Range	$T_{STG}$	-55 to +150									°C
Marking Code		SM 320A	SM 330A	SM 340A	SM 350A	SM 360A	SM 380A	SM 3100A	SM 3150A	SM 3200A	

### NOTES :

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



## Schottky Barrier Rectifiers

### Rating and Characteristics Curvers

FIG. 1-Typical Forward Current Derating Curve

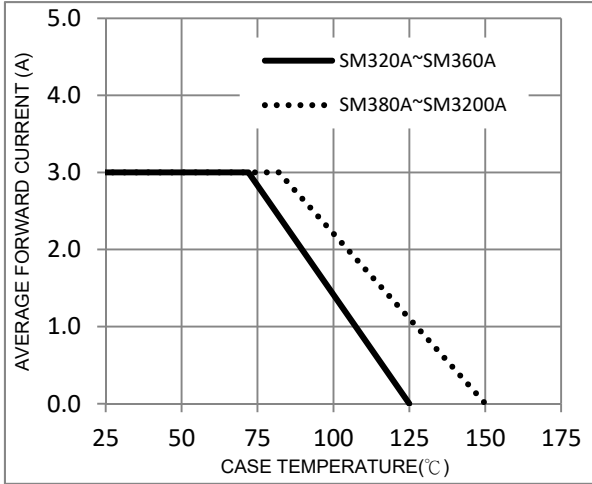


FIG. 2-Typical Forward Characteristics

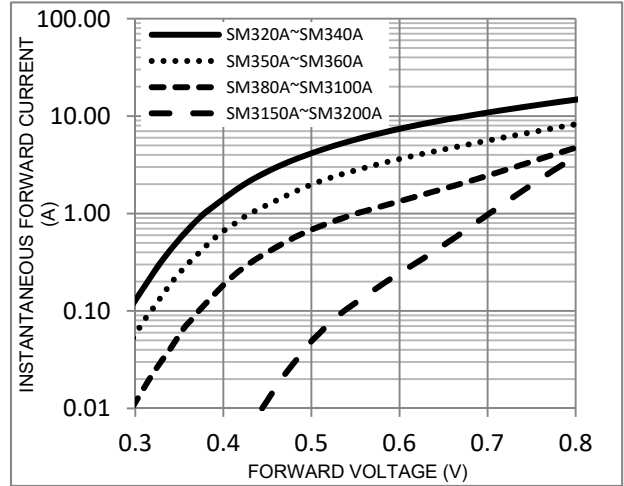


FIG. 3-Maximum Non-Repetitive Forward Surge Current

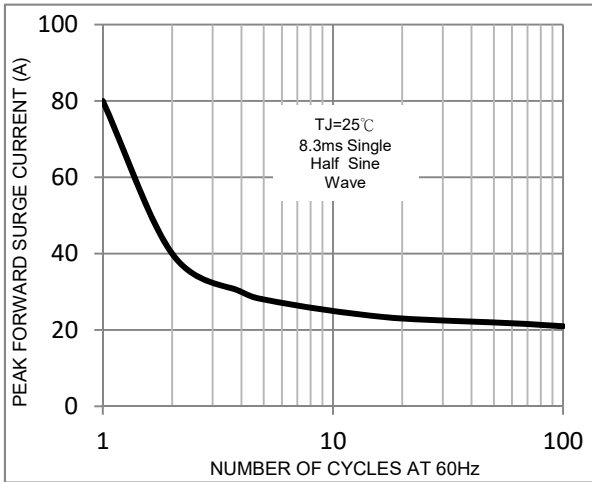


FIG. 4-Typical Reverse Characteristics

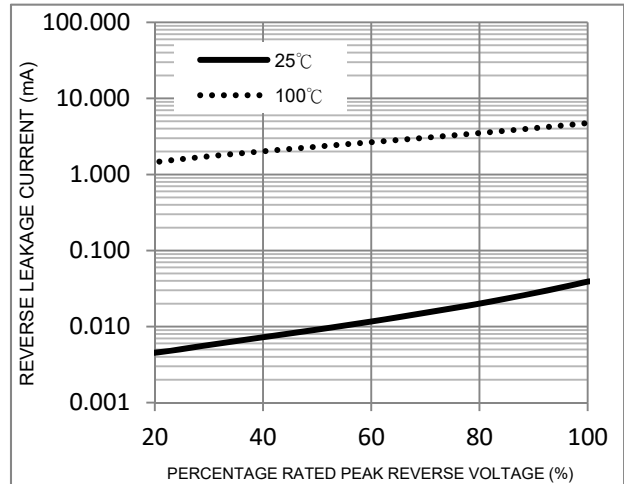
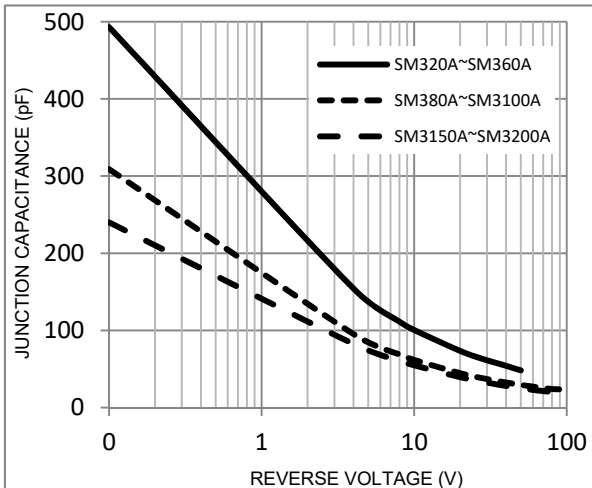


FIG. 5-Typical Junction Capacitance



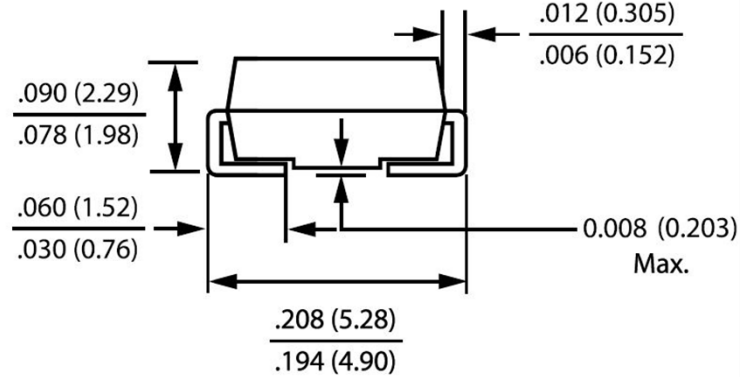
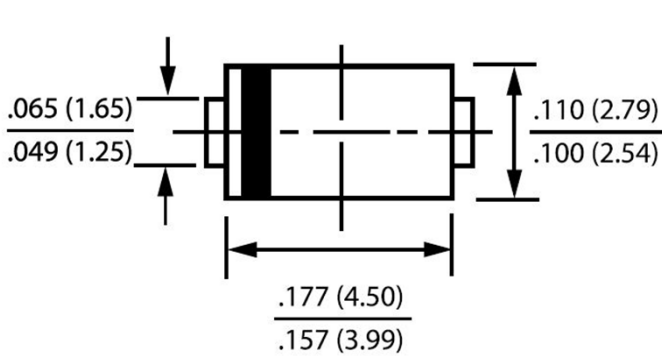


# SM320A thru SM3200A



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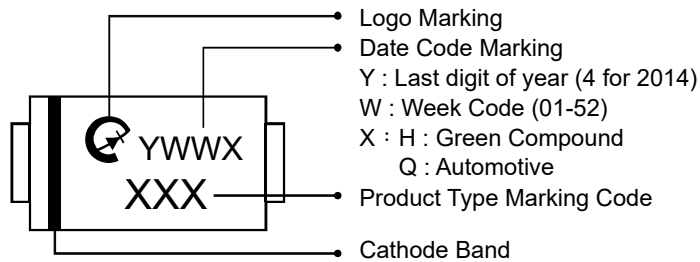
### Package Outline Dimensions



### DO-214AC(SMA)

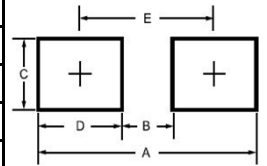
Dimensions in inches and (millimeters)

### Marking Information



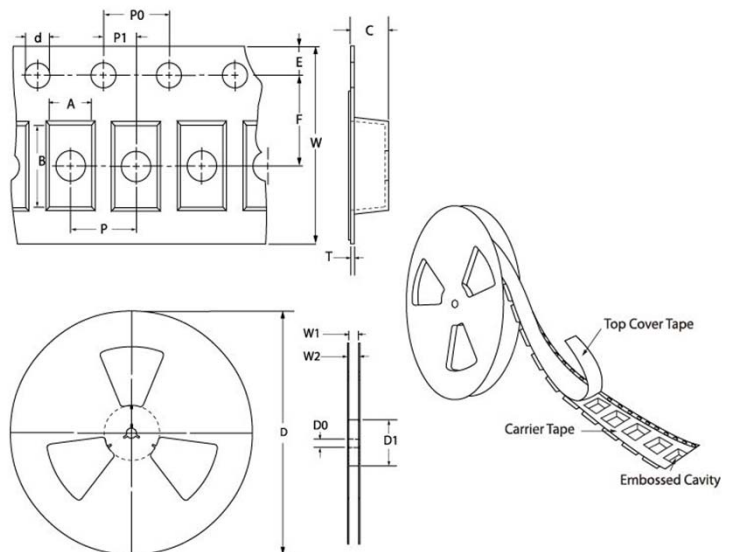
### Suggested Pad Layout

Outline Dimension	SMA(mm) DO-214AC
A	6.50
B	1.50
C	1.70
D	2.50
E	4.00



### Tape & Reel Specification

Item	Symbol	SMA(mm) DO-214AC
Carrier width	A	2.9(max)
Carrier length	B	5.9(max)
Carrier depth	C	2.66(max)
Sprocket hole	d	1.50±0.1
Reel outside diameter	D	330±2.0
Feed hole diameter	D0	13.5±1
Reel inner diameter	D1	50 (min.)
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.05
Sprocket 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	W2	18.4 (max)
Reel width	W1	14.4 (max)





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