

SMA Surface Mount Schottky Barrier Rectifier

Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

Applications

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping.

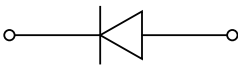
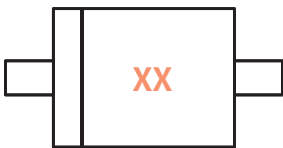
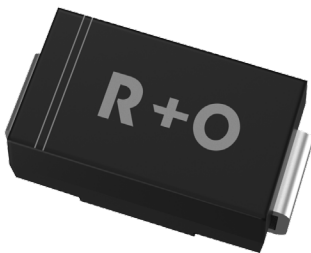
Mechanical Data

- Case: DO-214AC(SMA)
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

Function Diagram

Reverse Voltage
20-100 V
Forward Current
3 Ampere

DO-214AC(SMA)



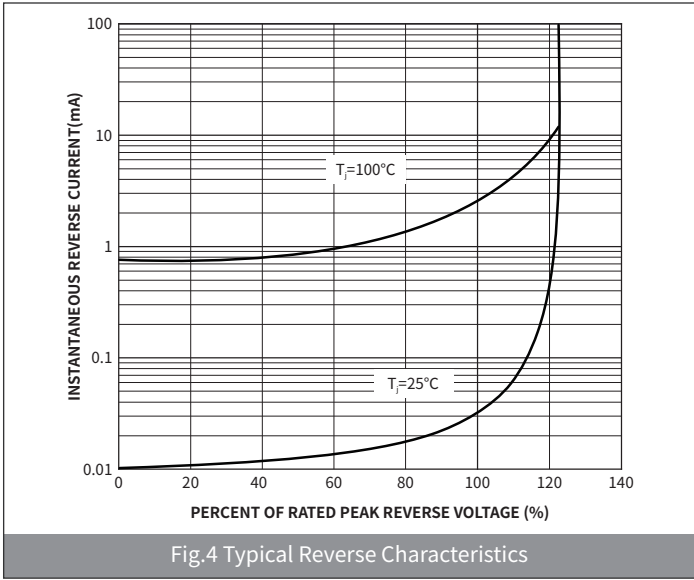
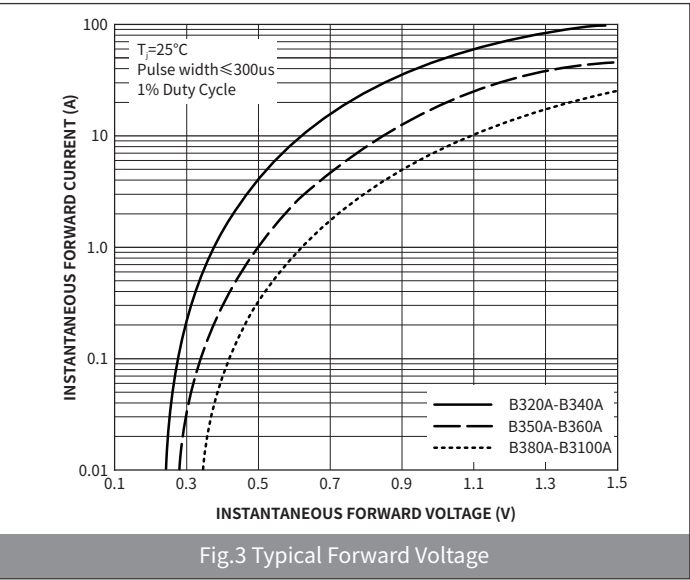
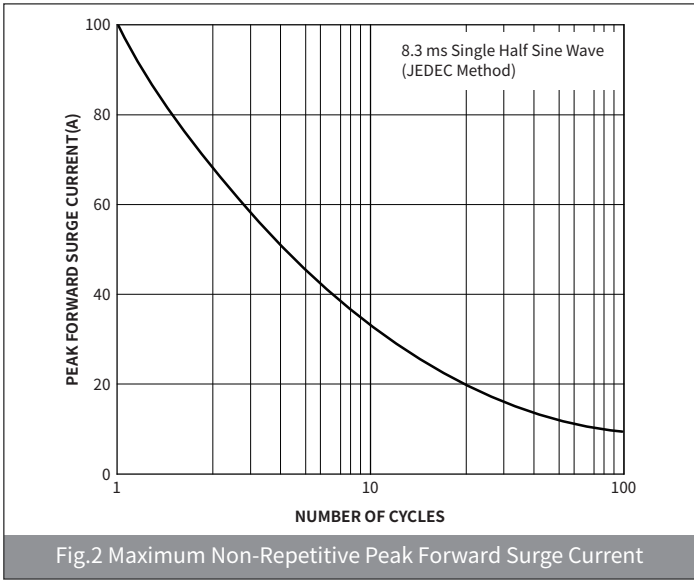
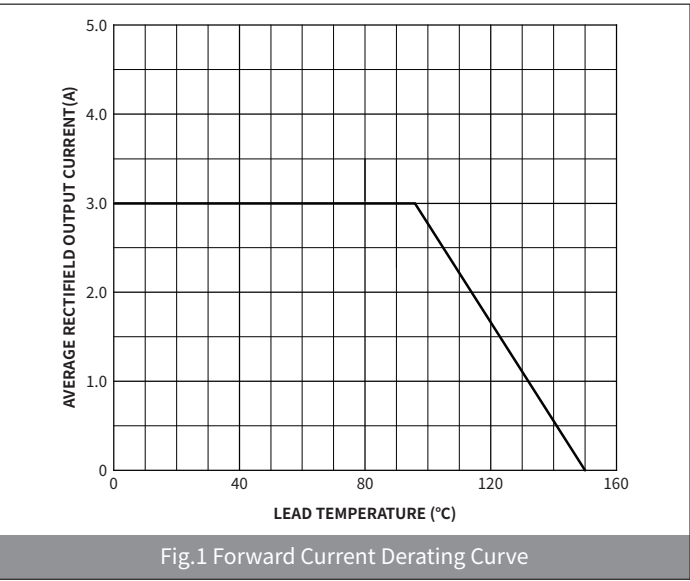
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	B320A	B330A	B340A	B350A	B360A	B380A	B390A	B3100A
Device marking code			B320A	B330A	B340A	B350A	B360A	B380A	B390A	B3100A
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	20	30	40	50	60	80	90	100
Maximum RMS Voltage	V _{RMS}	V	14	21	28	35	42	56	63	70
Maximum DC blocking Voltage	V _{DC}	V	20	30	40	50	60	80	90	100
Maximum Average Forward Rectified Current @ 60Hz sinewave, Resistance load, TL (Fig.1)	I _{F(AV)}	A	3.0							
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I _{FSM}	A	100							
Storage temperature	T _{stg}	°C	-55 ~ +150							
Junction temperature	T _j	°C	-55 ~ +150							
Typical Thermal Resistance	R _{θJ-A}	°C /W	140							
	R _{θJ-L}	°C /W	25							

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	B320A	B330A	B340A	B350A	B360A	B380A	B390A	B3100A
Maximum instantaneous forward voltage	I _F =3.0A	V _F	V	0.55			0.70		0.85		
Maximum DC reverse currentat rated DC blocking voltage	V _R =V _{DC} , T _A =25°C	I _{R1}	mA	0.05					0.02		
	V _R =V _{DC} , T _A =100°C	I _{R2}		5					2		
Typical junction capacitance	4.0V DC,1MHz	C _J	pF	300							

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



B320A THRU B3100A

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

● Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SMA	R2	0.07	5000	10000	80000	11"
SMA	R3	0.07	7500	15000	120000	13"

● Package Outline Dimensions (SMA/DO-214AC)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.25	1.65	0.049	0.065
B	3.95	4.65	0.156	0.183
C	2.35	2.85	0.093	0.112
D	1.98	2.41	0.078	0.095
E	0.76	1.52	0.030	0.060
F	-	0.203	-	0.008
G	4.70	5.30	0.185	0.209
H	0.15	0.31	0.006	0.012

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	1.70	-	0.067	-
J	2.10	-	0.082	-
K	-	2.30	-	0.090