

SMC Surface Mount Schottky Barrier Rectifier

Features

- Ideal for surface mounted applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

Applications

For use in low voltage high frequency inverters, free wheeling,DC/DC converters, and polarity protection applications.

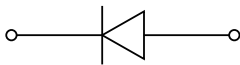
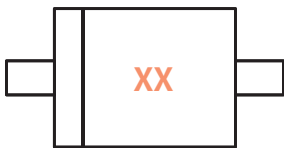
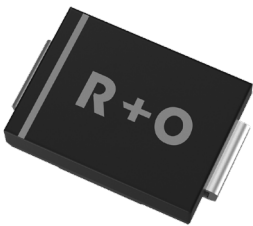
Mechanical Data

- Case: DO-214AB(SMC)
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
40 V
Forward Current
3 Ampere

DO-214AB(SMC)



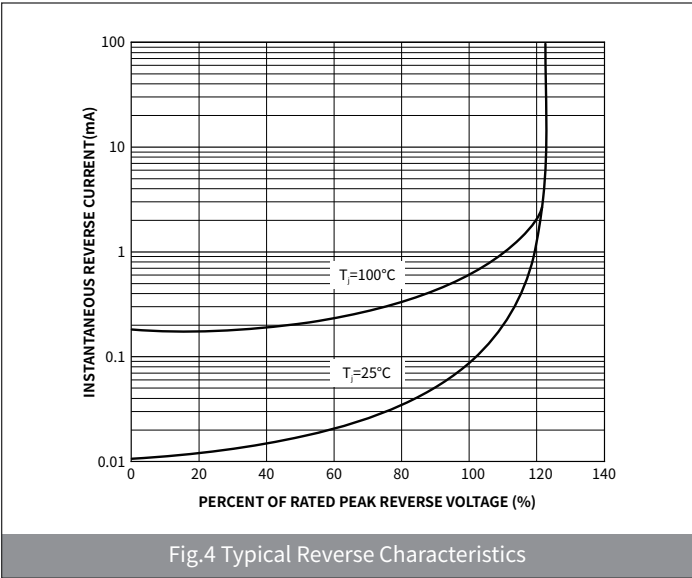
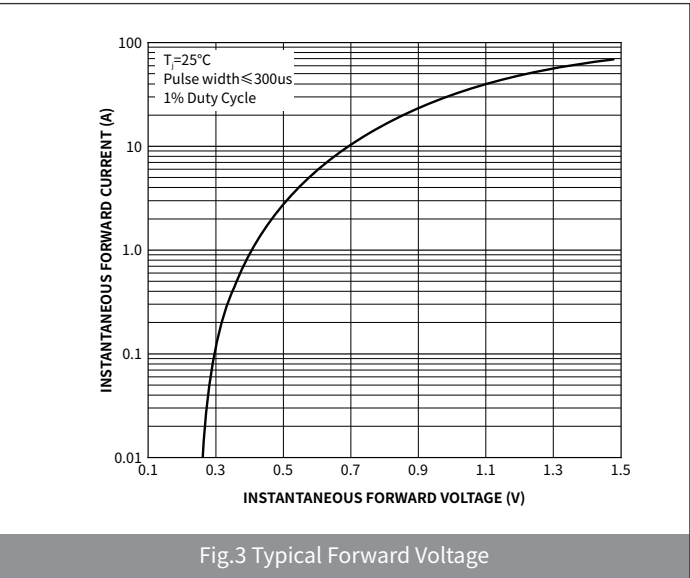
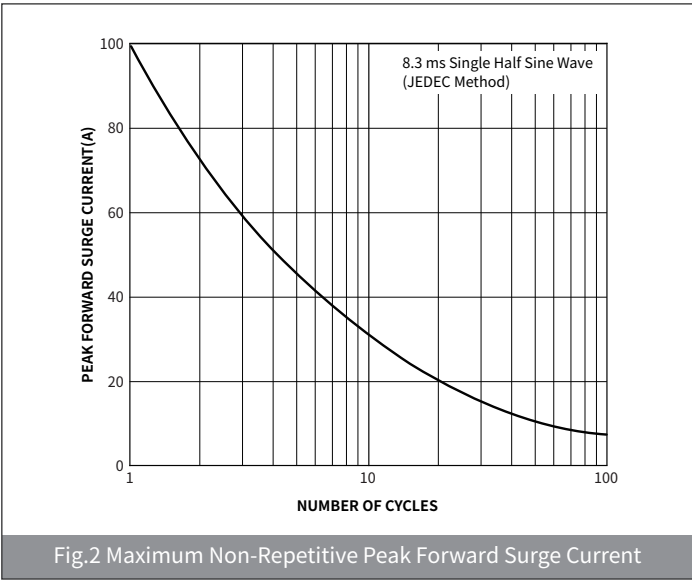
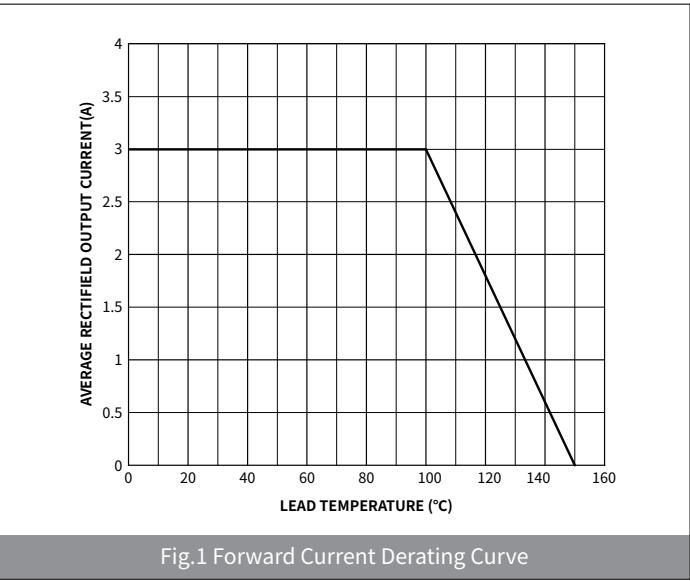
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SK34C
Device marking code			SK34C
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	40
Maximum RMS Voltage	V_{RMS}	V	28
Maximum DC blocking Voltage	V_{DC}	V	40
Maximum Average Forward Rectified Current @60Hz sine wave, 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	-65 ~ +150
Junction temperature	T_j	°C	-65 ~ +150
Typical Thermal Resistance	$R_{\theta J-L}$	°C /W	10

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SK34C
Maximum instantaneous forward voltage	$I_F=3.0A$	V_F	V	0.55
Maximum DC reverse currentat rated DC blocking voltage	$V_R=V_{DC}, T_A=25^{\circ}C$	I_{R1}	mA	0.1
	$V_R=V_{DC}, T_A=100^{\circ}C$	I_{R2}		5
Typical junction capacitance	4.0V DC,1MHz	C_J	pF	300

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



● Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SMC	R3	0.257	3000	6000	48000	13"

● Package Outline Dimensions (SMC/DO-214AB)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.85	3.27	0.112	0.129
B	6.60	7.11	0.261	0.281
C	5.59	6.22	0.221	0.246
D	1.99	2.61	0.078	0.103
E	0.76	1.52	0.030	0.060
F	-	0.20	-	0.008
G	7.75	8.13	0.306	0.321
H	0.15	0.31	0.006	0.012

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	3.82	-	0.151	-
J	3.03	-	0.120	-
K	-	3.84	-	0.152