



EBRT10E100C



Excellent Schottky Barrier Rectifiers



DO-214AB(SMC)

Primary Characteristics

I_F	10	A
V_{RRM}	100	V
I_{FSM}	100	A
V_F	0.7	V
T_J max	150	°C

Features

- Low Profile Package
- Ideal for Automated Placement
- Guard Ring for Over Voltage Protection
- Low Forward Voltage Drop

Mechanical Data

- Case : DO-214AB (SMC)
- 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 : 0.231 grams (approximate)

Ordering Information

Part No.	Remark	Package	Packing
EBRT10E100C	RoHS Compliant	SMC	3000 / Tape & Reel
EBRT10E100C-H	Halogen Free		
EBRT10E100C-Q	AEC-Q101 qualified		

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

Parameter	Symbol	EBRT10E100C	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage $I_F=2A$ @ 25°C $I_F=10A$ @ 25°C	V_F	0.44 Typ. 0.70 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I_R	0.2 20	mA
Typical Junction Capacitance (NOTE1)	C_j	820	pF
Typical Thermal Resistance	$R_{\theta JC}$	20	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Marking Code		T10E100C、10E100C	

NOTES :

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



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Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

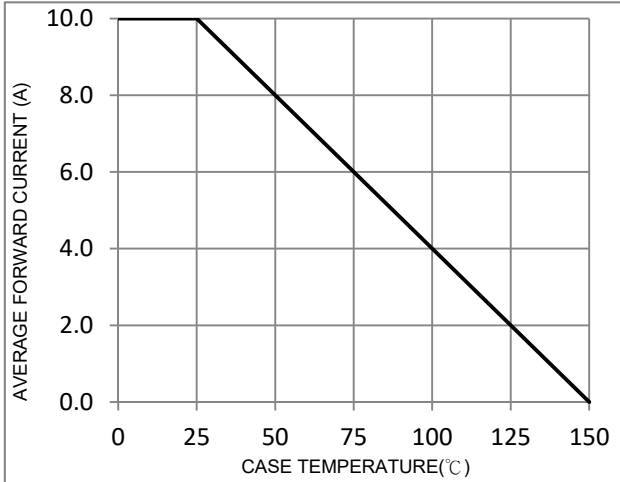


FIG. 2-Typical Forward Characteristics

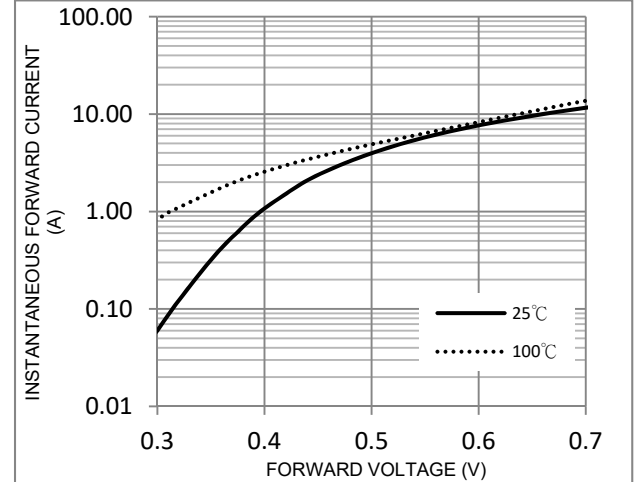


FIG. 3-Maximum Non-Repetitive Forward Surge Current

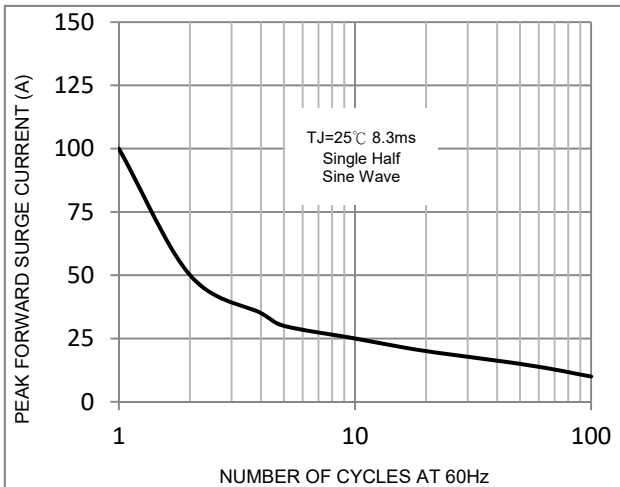


FIG. 4-Typical Reverse Characteristics

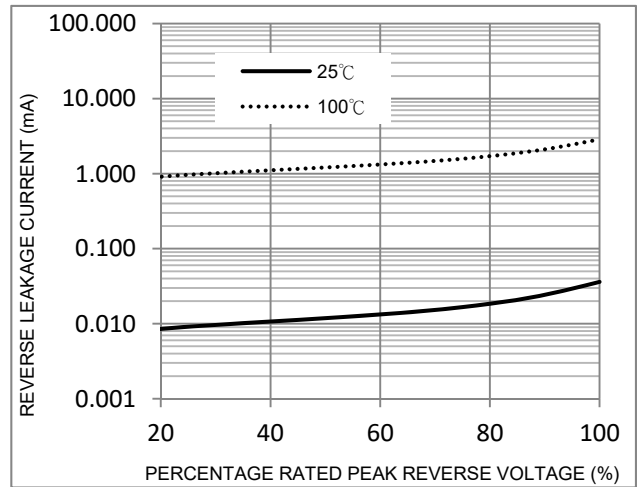
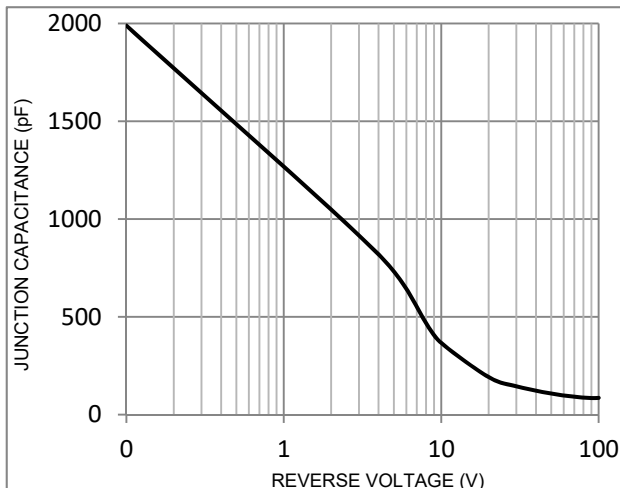


FIG. 5-Typical Junction Capacitance



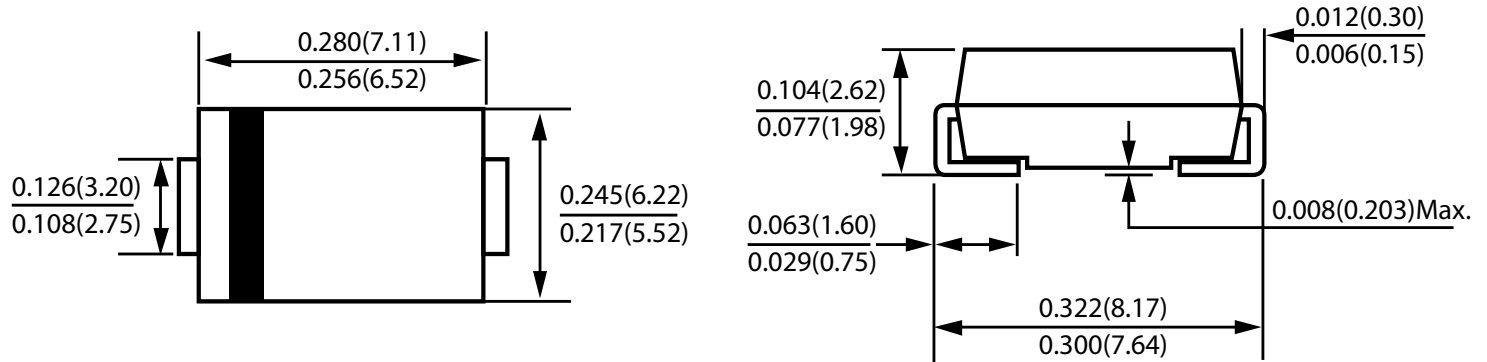


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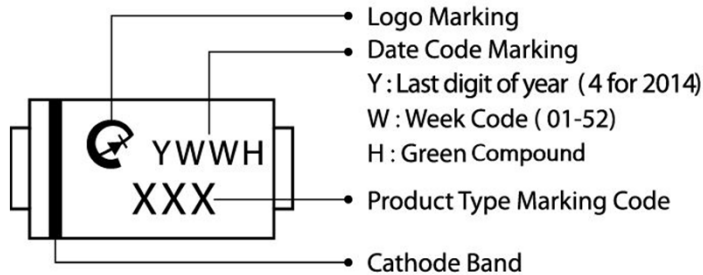
Package Outline Dimensions



DO-214AB(SMC)

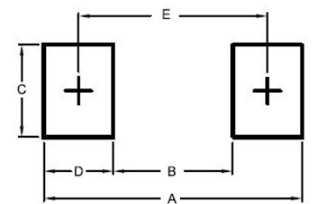
Dimensions in inches and (millimeters)

Marking Information



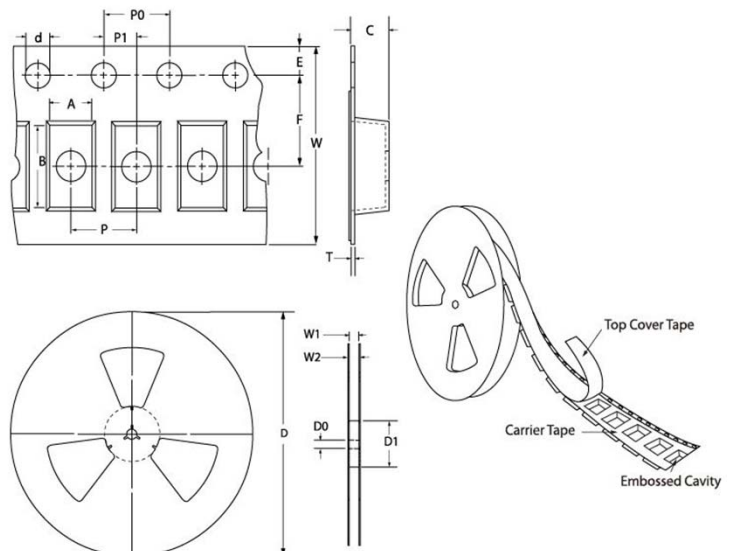
Suggested Pad Layout

Outline Dimension	SMC (DO-214AB)
A	9.40
B	4.40
C	3.30
D	2.50
E	6.80



Tape & Reel Specification

Item	Symbol	SMC (mm) DO-214AB
Carrier width	A	6.3 (max)
Carrier length	B	8.6 (max)
Carrier depth	C	2.9 (max)
Sprocket hole	d	1.50 ± 0.1
Reel outside diameter	D	330 ± 2.0
Feed hole diameter	D0	13.5 ± 1.0
Reel inner diameter	D1	50 (min)
Sprocket hole position	E	1.75 ± 0.1
Punch hole position	F	7.5 ± 0.1
Sprocket hole pitch	P	8.0 ± 0.1
Sprocket hole pitch	P0	4.0 ± 0.1
Embossment center	P1	2.0 ± 0.1
Overall tape thickness	T	0.6 (max)
Tape width	W	16.0 ± 0.3
Reel width	W2	22.4 (max)
Reel width	W1	18.4 (max)





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