





Primary Characteristics				
l <sub>F</sub>	5	Α		
$V_{RRM}$	60	V		
I <sub>FSM</sub>	100	Α		
$V_{F}$	0.50	V		
T <sub>J</sub> max	150	°C		

### **Features**

- · Low profile package
- · Ideal for automatic placement
- Guard Ring for over voltage protection
- · Low forward voltage drop

### **Mechanical Data**

· Case: DO-214AB(SMC)

Case Material : Molded Plastic. UL Flammability
Classification Pating 04V 0

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		
EBRT5E60C	General				
EBRT5E60C-H	Halogen Free	SMC 3000 / Tape & Reel			
EBRT5E60C-Q	AEC-Q101 qualified				

Maximum Ratings (TA=25°C unless otherwise noted)				
PARAMETER	SYMBOL	EBRT5E60C	UNIT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	60	V	
Maximum RMS voltage	V <sub>RMS</sub>	42	V	
Maximum DC blocking voltage	V <sub>DC</sub>	60	V	
Maximum average forward rectified current	I <sub>F</sub>	5.0	A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	100.0	А	
Maximum Instantaneous Forward Voltage IF=2A @ 25°C IF=5A @ 25°C	V <sub>F</sub>	0.36 Typ. 0.50 Max.	V	
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I <sub>R</sub>	0.5 15	mA	
Typical Junction Capacitance (NOTE1)	C <sub>j</sub>	330	pF	
Typical Thermal Resistance	R <sub>eJC</sub>	25	°C/W	
Operating Temperature Range	TJ	-55 to +150	°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C	
Marking Code		T5E60C \ 5E60C		

### NOTES:

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





# **Rating and Characteristics Curves**

FIG. 1-Typical Forward Current Derating Curve

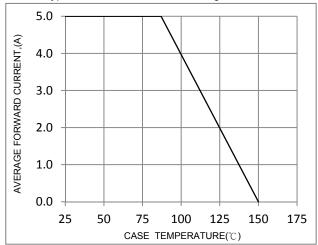


FIG. 3-Maximum Non-Repetitive Forward Surge Current

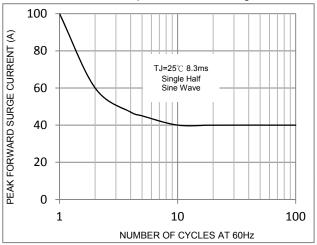


FIG. 5-Typical Junction Capacitance

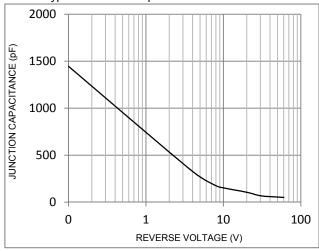


FIG. 2-Typical Forward Characteristics

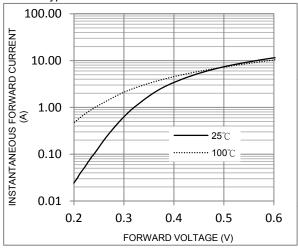
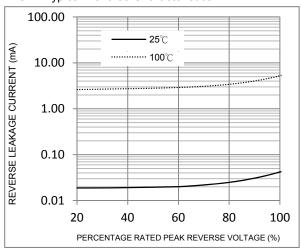


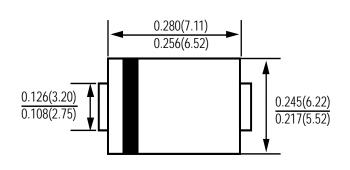
FIG. 4-Typical Reverse Characteristics

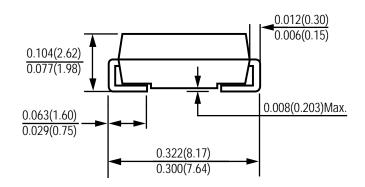






# **Package Outline Dimensions**





# DO-214AB(SMC)

SMC (mm)

DO-214AB

2.0±0.1

0.6 (max)

16.0±0.3

22.4 (max)

18.4 (max)

Dimensions in inches and (millimeters)

#### **Marking Information**

**Tape & Reel Specification** 

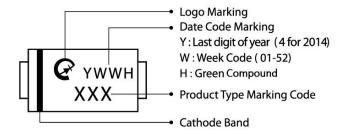
**ITEM** 

Embossment center

Tape width Reel width

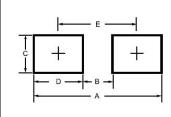
Reel width

Overall tape thickness



### **Suggested Pad Layout**

Outline Dimension	SMC DO-214AB	
Α	9.40	
В	4.40	
С	3.30	
D	2.50	
E	6.80	



#### Carrier width Α 6.3(max) Carrier length В 8.6(max) 2.9(max) Carrier depth С Sprocket hole 1.50±0.1 d Reel outside diameter D 330±2.0 13.5±1 Feed hole diameter D0 Reel inner diameter 50 (min.) D<sub>1</sub> Sprocket hole position Ε 1.75±0.1 Punch hole position F 7.5±0.1 Р Sprocket hole pitch 8.0±0.1 Sprocket hole pitch P0 4.0±0.1

**SYMBOL** 

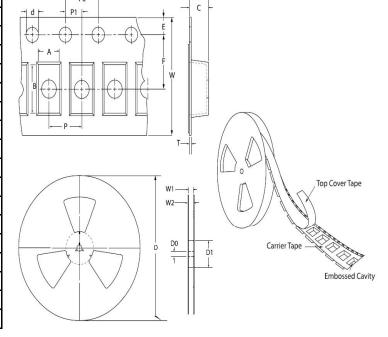
Р1

Т

W

W2

W1







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