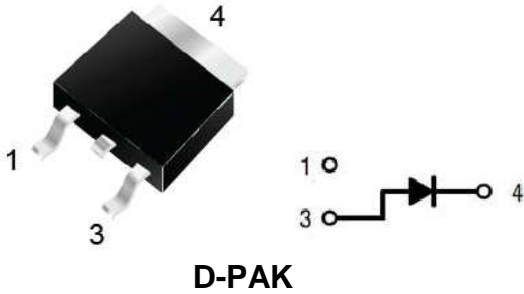




**EBRT10100SD**



## Excellent Schottky Barrier Rectifiers



### Primary Characteristics

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

### Features

- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Excellent Barrier Rectifier Technology
- Soft, Fast Switching Capability

### Mechanical Data

- Case: DPAK
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 0.34 grams (approximate)

### Ordering Information

Part No.	Remark	Package	Packing
EBRT10100SD	General	DPAK	3000 / Reel
EBRT10100SD-H	Halogen Free		

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

PARAMETER	SYMBOL	EBRT10100SD	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 $I_F=2A @ 25^\circ C$ $I_F=10A @ 25^\circ C$	$V_F$	0.44 Typ. 0.70 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	$I_R$	3 10	mA
Typical Junction Capacitance(NOTE1)	$C_j$	545	pF
Typical Thermal Resistance	$R_{\theta JC}$	10	°C/W
Operating Temperature Range	$T_J$	-55 to +150	°C
Storage Temperature Range	$T_{STG}$	-55 to +175	°C
Marking Code		T10100SD · 10100SD	

### NOTES:

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



## Excellent Schottky Barrier Rectifiers

### Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

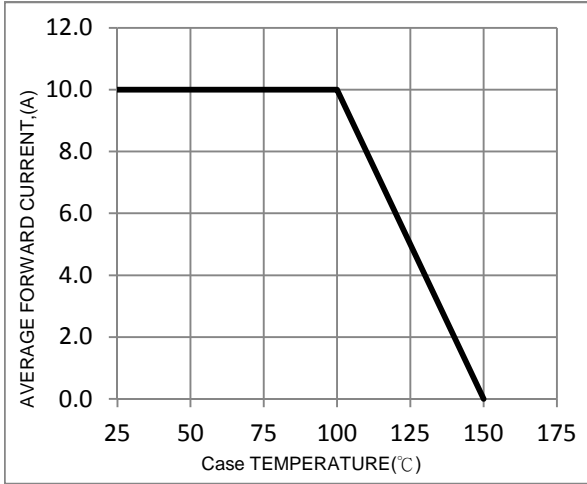


FIG. 2-Typical Forward Characteristics

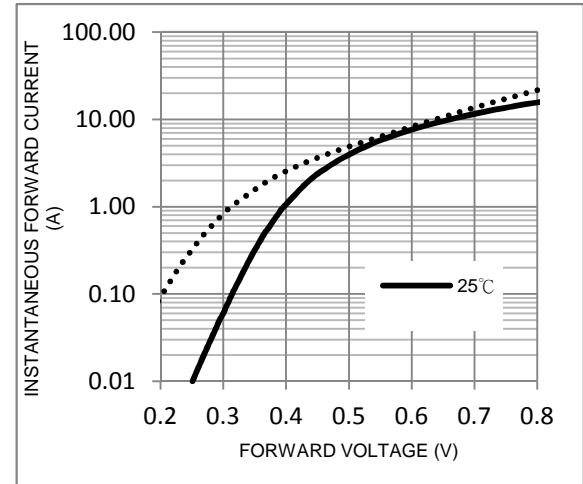


FIG. 3-Maximum Non-Repetitive Forward Surge Current

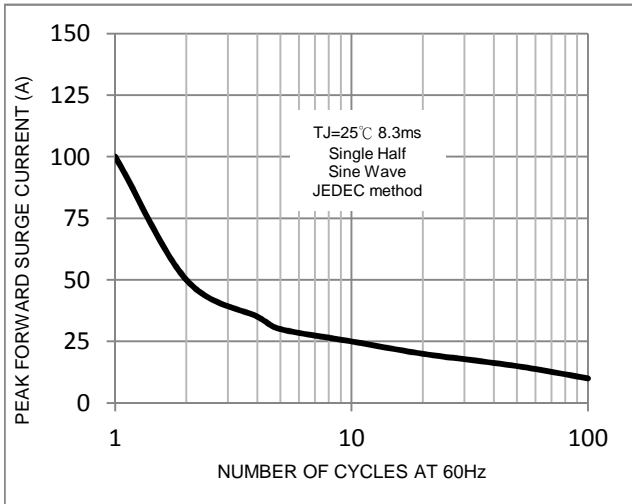


FIG. 4-Typical Reverse Characteristics

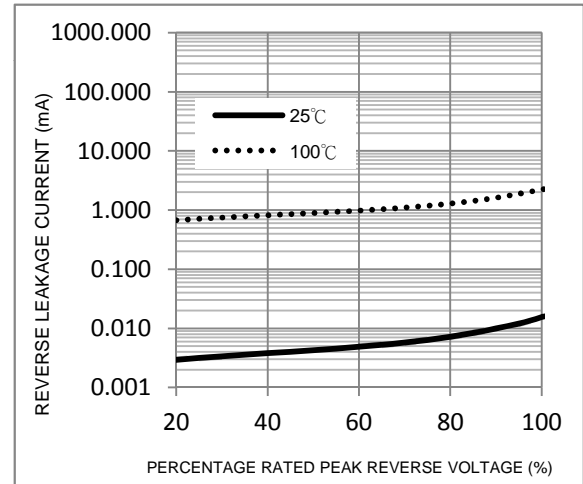
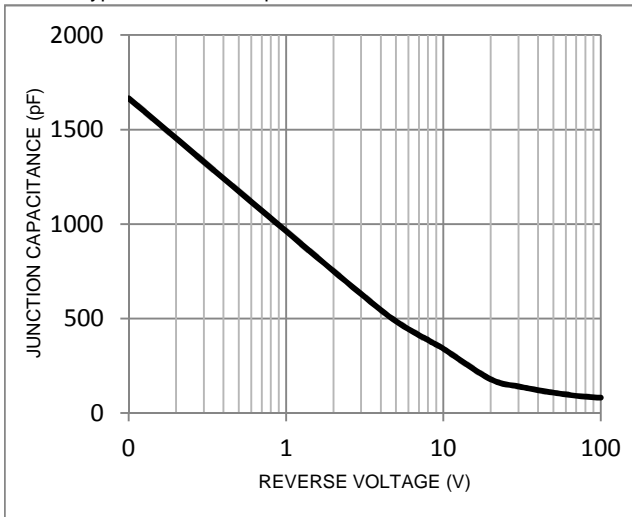
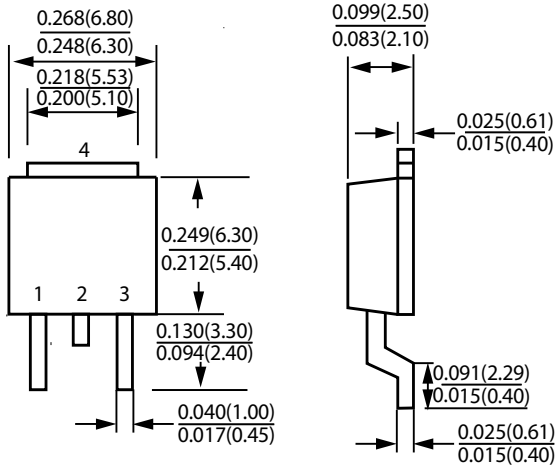


FIG. 5-Typical Junction Capacitance





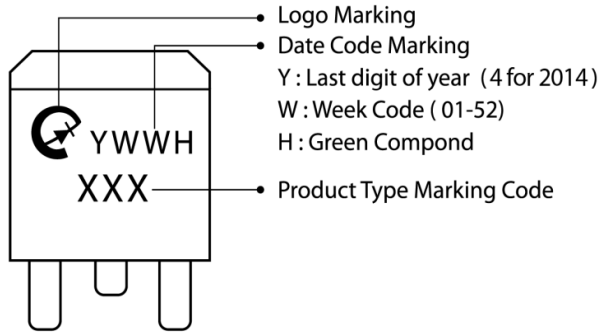
**Package Outline Dimensions**



**D-PAK**

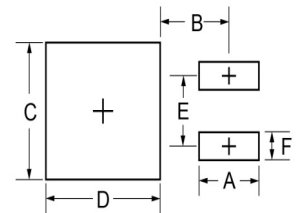
Dimensions in inches and (millimeters)

**Marking Information**



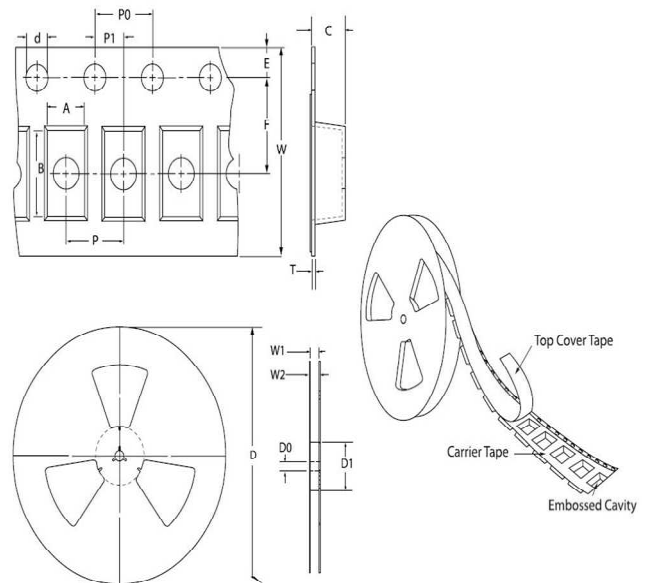
**Suggested Pad Layout**

Outline Dimension	DPAK (mm)
A	2.00
B	3.70
C	5.80
D	5.85
E	4.57
F	1.20



**Tape & Reel Specification**

Item	Symbol	Dimension (mm)
Carrier width	A	6.9±0.10
Carrier length	B	10.5±0.10
Carrier depth	C	2.7±0.10
Sprocket hole	d	1.55±0.10
Reel outside diameter	D	330±2
Reel inner diameter	D1	100±1
Feed hole width	D2	21±1
Sprocket hole position	E	1.75 ±0.10
Punch hole position	F	7.5±0.10
Punch hole pitch	P	8.00±0.10
Sprocket hole pitch	P0	4.00±0.10
Embossment center	P1	2.00 ±0.10
Tape width	W	16.00+0.3/-0.1
Reel width	W1	16.40±1





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