



## Schottky Barrier Rectifiers



TO-277



### Primary Characteristics

$I_F$	15	A
$V_{RRM}$	100	V
$I_{FSM}$	250	A
$V_F$	0.66	V
$T_J \text{ max}$	150	°C

### Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case : TO-277, molded plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method208
- Polarity : Cathode Band
- Mounting Position : Any
- Lead Free : For RoHS / Lead Free Version

### Ordering Information

Part No.	Remark	Package	Packing
EBRT15E100T	General	TO-277	5000 / Tape & Reel
EBRT15E100T-H	Halogen Free		

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

Parameter	Symbol	EBRT15E100T	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	70	
Maximum DC blocking voltage	$V_{DC}$	100	
Average Rectified Output Current	$I_{F(AV)}$	15	A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load	$I_{FSM}$	250	A
$I^2t$ Rating for Fusing (t<8.3ms)	$I^2t$	259.375	A <sup>2</sup> s
Forward Voltage Drop IF=1A@TA=25°C IF=5A@TA=25°C IF=10A@TA=25°C IF=15A@TA=25°C	$V_{FM}$	0.38 Typ. 0.47 Typ. 0.55 Typ. 0.66 Max.	V
Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=100°C	$I_R$	0.3 15	mA
Typical Thermal Resistance	$R_{\theta JA}$	110	°C/W
	$R_{\theta JL}$	3.5	
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C
Marking Code		T15E100T	



Rating and Characteristics Curves

FIG. 1-Forward Current Derating Curve

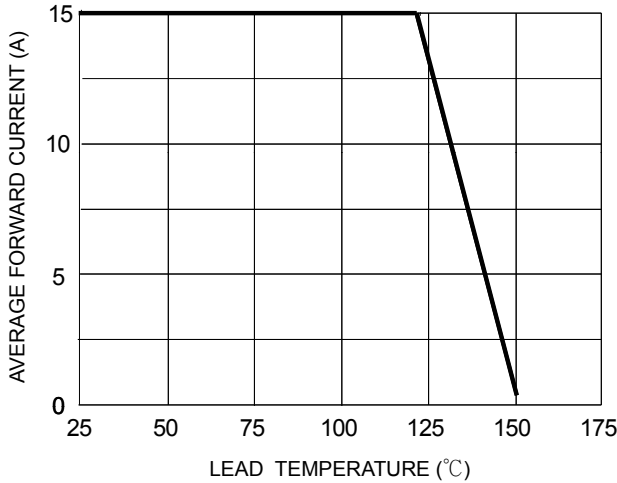


FIG. 2-Typical Forward Characteristics

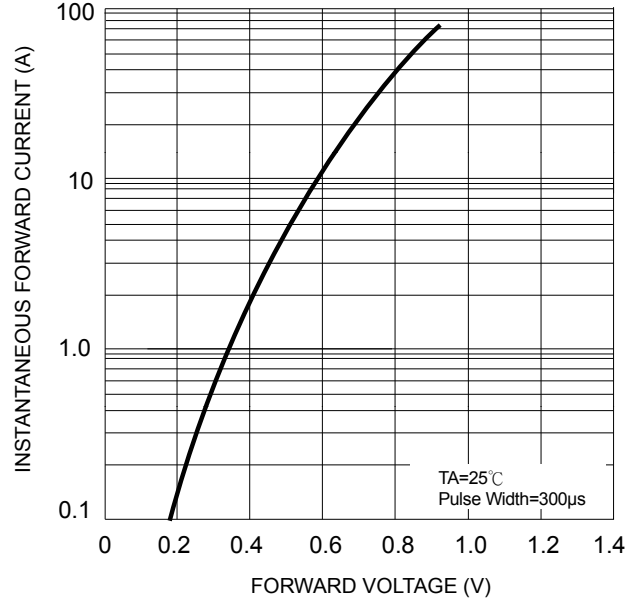


FIG. 3-Maximum Peak Forward Surge Current

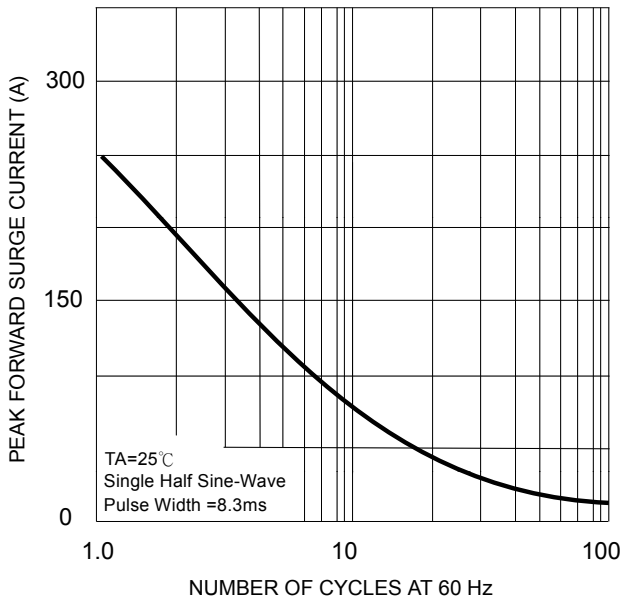
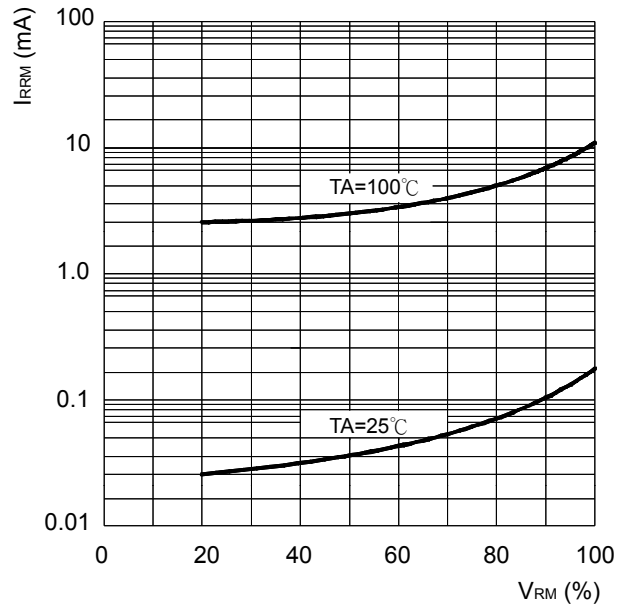
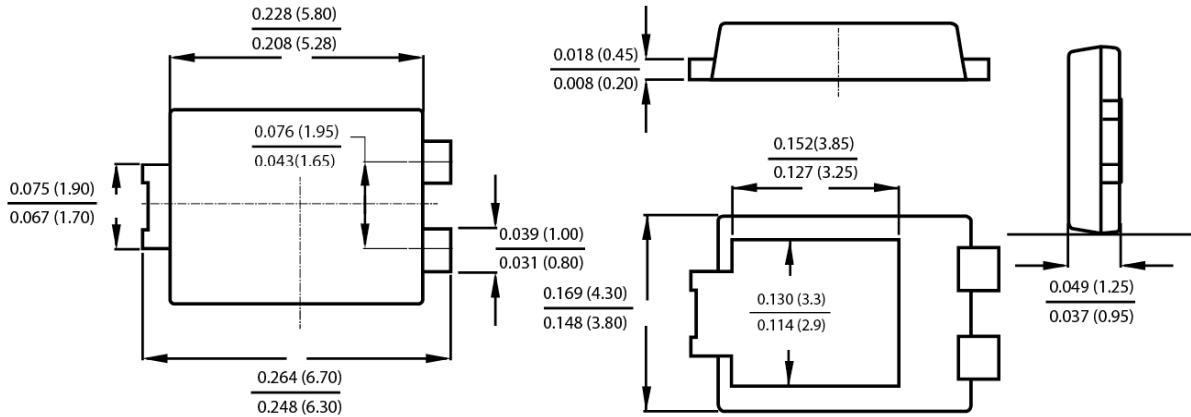


FIG. 4-Typical Reverse Characteristics





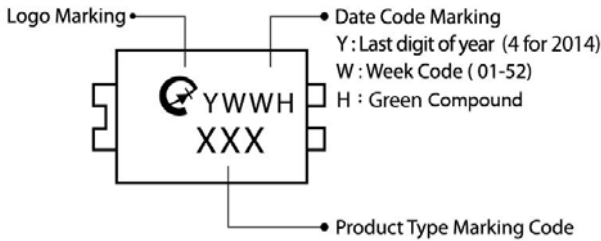
**Package Outline Dimensions**



**TO-277**

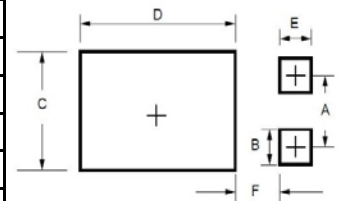
Dimensions in inches and (millimeters)

**Marking Information**



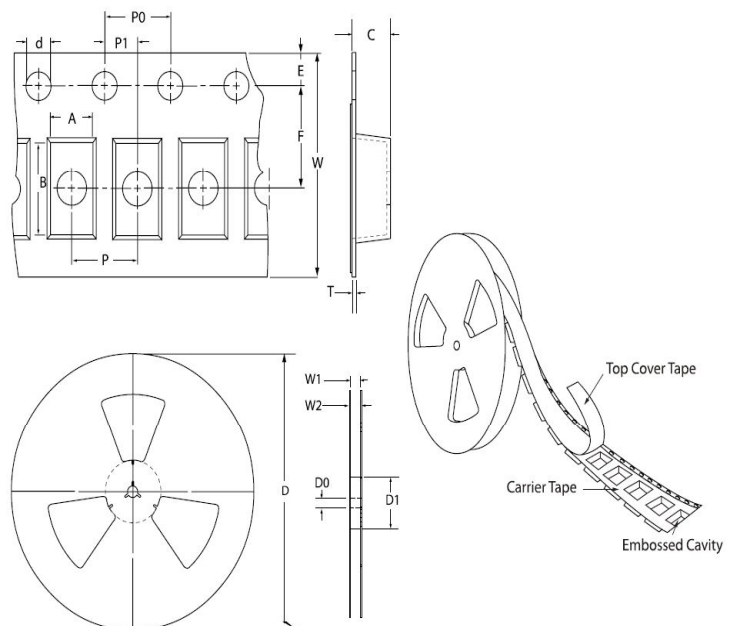
**Suggested Pad Layout**

Outline Dimension	TO-277
A	1.94
B	1.10
C	3.35
D	4.90
E	1.00
F	1.40



**Tape & Reel Specification**

ITEM	SYMBOL	TO-277 (mm)
Carrier width	A	4.38 (max)
Carrier length	B	6.9 (max)
Carrier depth	C	1.4±0.1
Sprocket hole	d	1.50±0.1
Reel outside diameter	D	330±2.0
Feed hole diameter	D0	13.0+0.5/-0.2
Reel inner diameter	D1	50 (min)
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.05
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	12.0±0.15
Reel width	W2	20 (max)
Reel width	W1	16 (max)





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