



EBRT20E120CT



Excellent Schottky Barrier Rectifiers



TO-220AB

Features

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

Ordering Information

Part No.	Package	Packing
EBRT20E120CT	TO-220AB	50 & 2000 / Tube & Box

Device P/N

Part Number	Remark
EBRT20E120CT	General
EBRT20E120CT-H	Halogen Free

Primary Characteristics

I_F	20	A
V_{RRM}	120	V
I_{FSM}	150	A
V_F	0.79	V
$T_J \text{ max}$	150	°C

Mechanical Data

- Case: TO-220AB
- 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: 2.015 grams (approximate)

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

PARAMETER	SYMBOL	EBRT20E120CT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	120	V
Maximum RMS voltage	V_{RMS}	84	V
Maximum DC blocking voltage	V_{DC}	120	V
Maximum average forward rectified current (Total) (Per Leg)	I_F	20 10	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage $I_F=2A @ 25^\circ C$ $I_F=10A @ 25^\circ C$ $I_F=10A @ 125^\circ C$	V_F	0.59 Typ. 0.79 Max. 0.69 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	I_R	0.2 10	mA
Typical Junction Capacitance(NOTE1)	C_j	680	pF
Typical Thermal Resistance	$R_{\theta JC}$	3	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C
Marking Code		T20E120CT · 20E120CT	

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

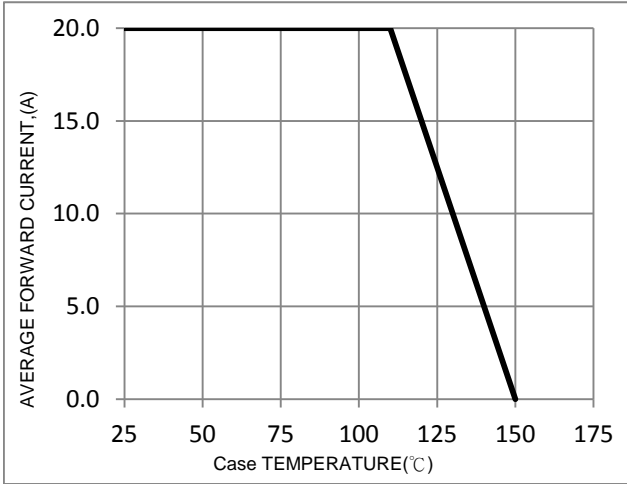


FIG. 2-Typical Forward Characteristics

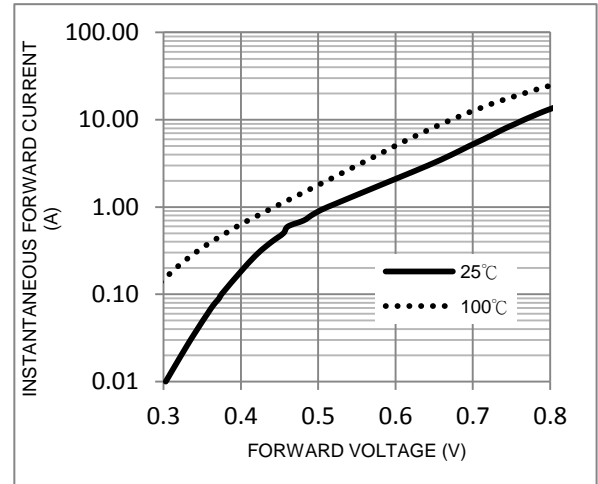


FIG. 3-Maximum Non-Repetitive Forward Surge Current

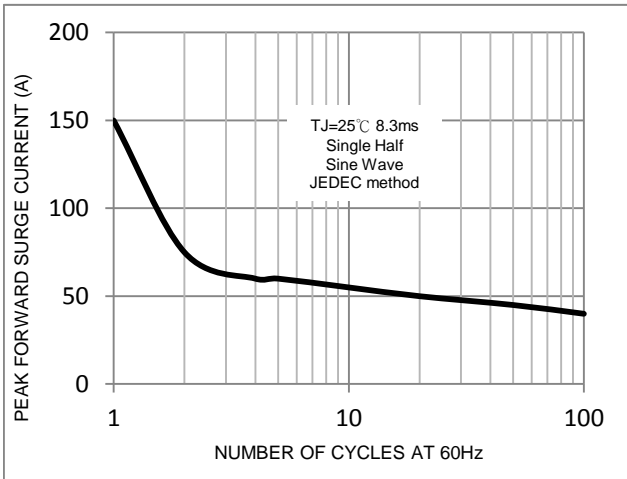


FIG. 4-Typical Reverse Characteristics

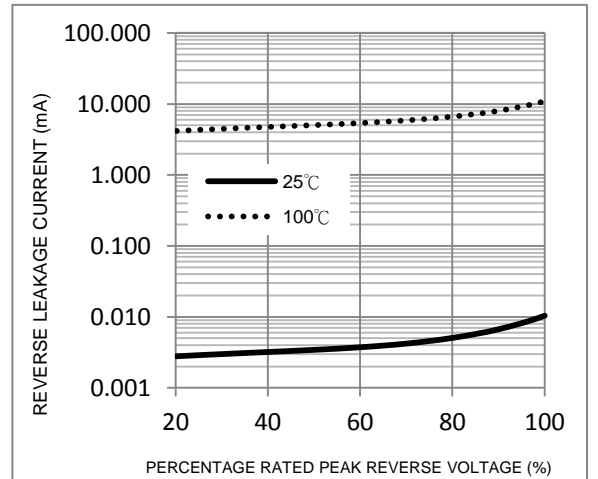
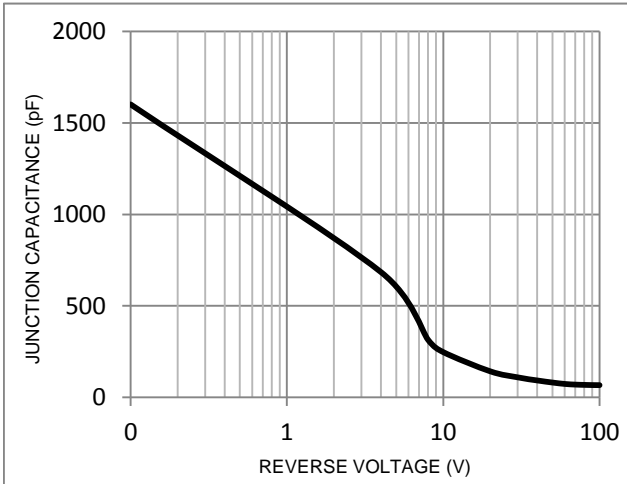


FIG. 5-Typical Junction Capacitance



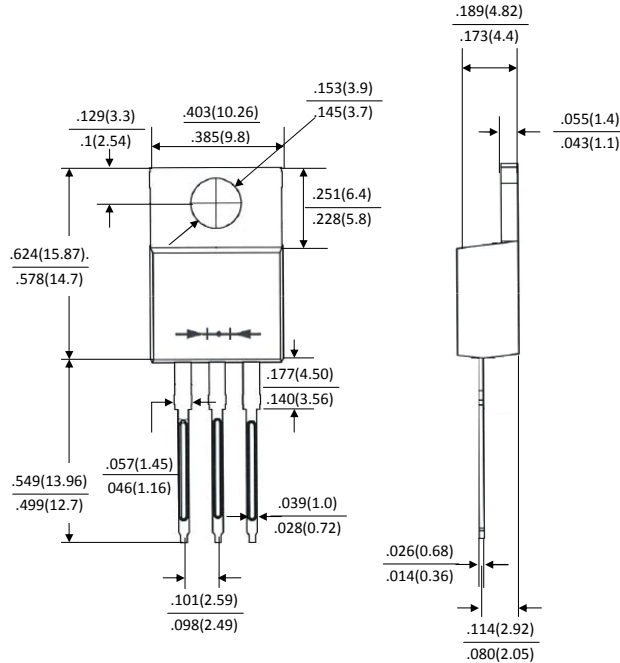


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Package Outline Dimensions



TO-220AB

Dimensions in inches and (millimeters)

Marking Information

