



EBRT5E45D



Excellent Schottky Barrier Rectifiers



DO-201AD

Primary Characteristics		
I_F	5	A
V_{RRM}	45	V
I_{FSM}	100	A
V_F	0.48	V
T_J max	150	°C

Features

- Guardring for overvoltage protection
- Very small conduction losses
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

Mechanical Data

- Cases: DO-201AD
- 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: 1.071 grams (approximate)

Ordering Information

Part No.	Remark	Package	Packing
EBRT5E45D	General	DO-201AD	1200 / Ammo Box
EBRT5E45D-H	Halogen Free		

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

PARAMETER	SYMBOL	EBRT5E45D	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum RMS voltage	V_{RMS}	31.5	V
Maximum DC blocking voltage	V_{DC}	45	V
Maximum average forward rectified current	I_F	5.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100.0	A
Maximum Instantaneous Forward Voltage IF=2A @ 25°C IF=5A @ 25°C IF=5A @ 125°C	V_F	0.37 Typ. 0.48 Max. 0.40 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	I_R	0.5 15	mA
Typical Junction Capacitance(NOTE1)	C_j	1,000	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		T5E45D 、 5E45D	

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

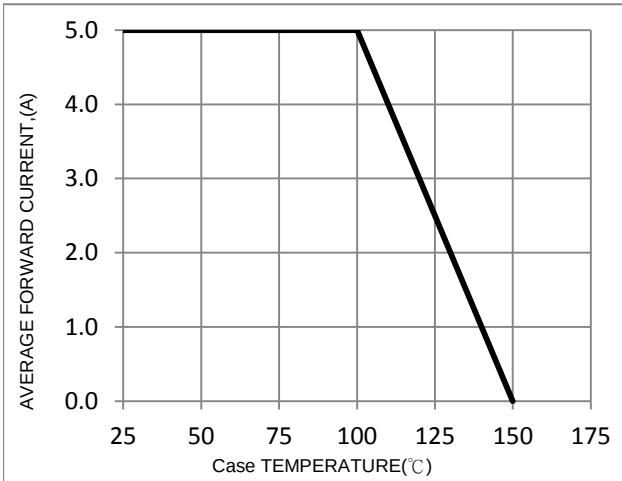


FIG. 2-Typical Forward Characteristics

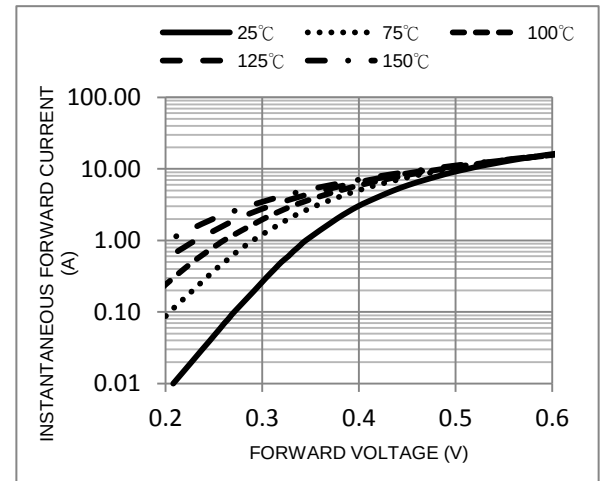


FIG. 3-Maximum Non-Repetitive Forward Surge Current

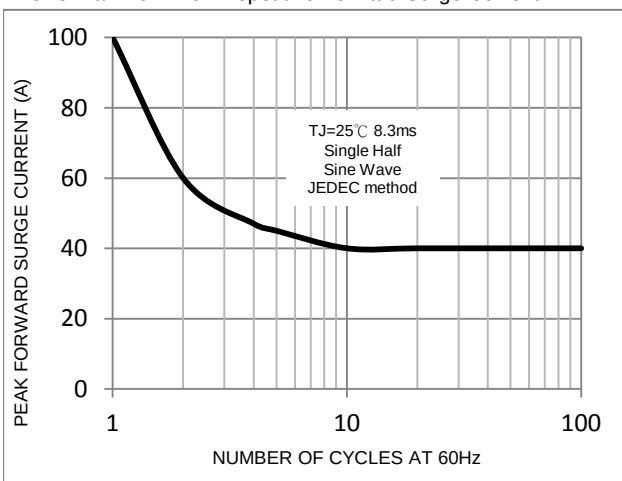


FIG. 4-Typical Reverse Characteristics

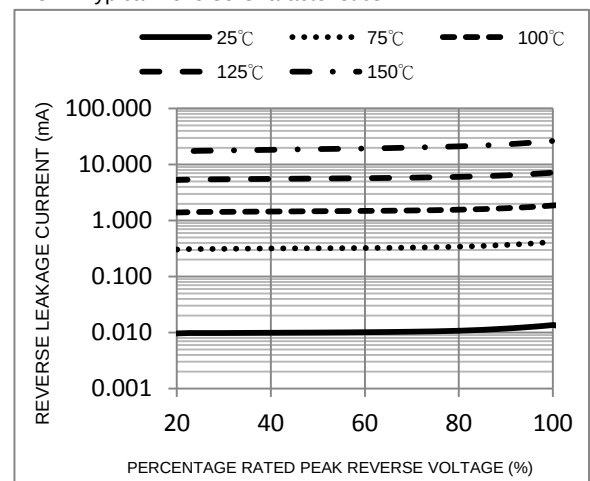
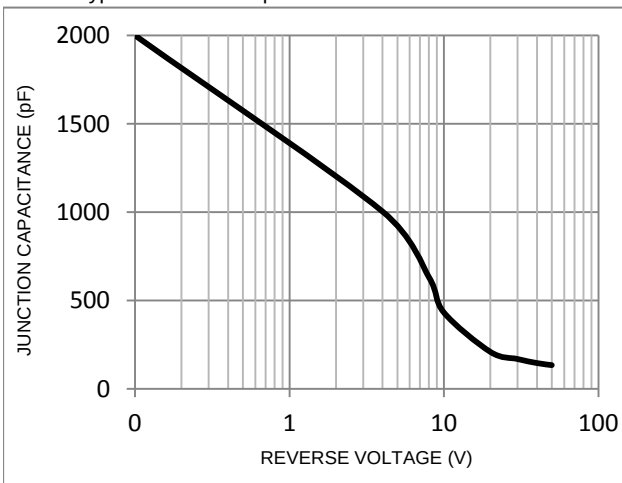


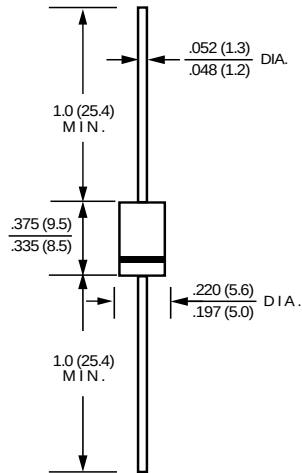
FIG. 5-Typical Junction Capacitance





Excellent Schottky Barrier Rectifiers

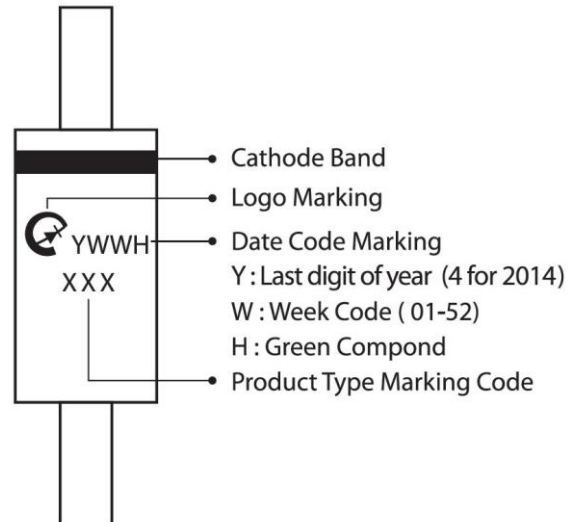
Package Outline Dimensions



DO-201AD

Dimensions in inches and (millimeters)

Marking Information



Ammo Box Packing

Package	Inner	BOX	Inner Box	Carton	Carton Size	Gross Weight
	Pack	(EA)	(mm)	(EA)	(mm)	(Kg)-Approx.
DO-201AD(DO-27)-52mm	Reel	1,200	255x75x150	12000	440x280x335	16