



EBRP10M45D



Excellen Schottky Barrier Rectifiers



DO-201AD

Primary Characteristics		
I_F	10	A
V_{RRM}	45	V
I_{FSM}	150	A
V_F	0.56	V
T_J max	150	°C

Features
<ul style="list-style-type: none"> • Guardring for overvoltage protection • Very small conduction losses • Low forward voltage drop • Component in accordance to RoHS 2002/95/EC

Mechanical Data
<ul style="list-style-type: none"> • 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
EBRP10M45D	General	DO-201AD	1200 / Ammo Box
EBRP10M45D-H	Halogen Free		

Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	EBRP10M45D	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	10.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0	A
Maximum Instantaneous Forward Voltage $I_F=2A @ 25^\circ\text{C}$ $I_F=10A @ 25^\circ\text{C}$ $I_F=10A @ 125^\circ\text{C}$	V_F	0.35 Typ. 0.56 Max. 0.49 Max.	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	0.5 20	mA
Typical Junction Capacitance(NOTE1)	C_j	320	pF
Typical Thermal Resistance	$R_{\theta JC}$	15	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Marking Code		P10M45D	

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

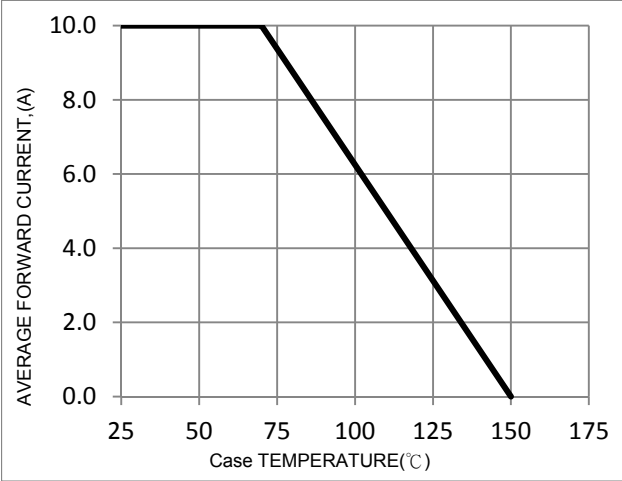


FIG. 2-Typical Forward Characteristics

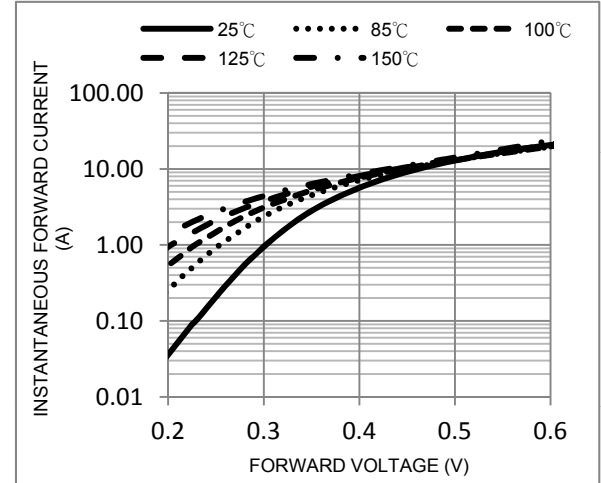


FIG. 3-Maximum Non-Repetitive Forward Surge Current

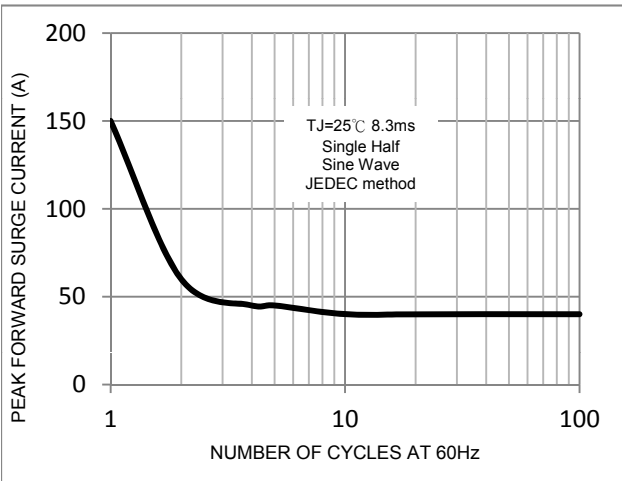


FIG. 4-Typical Reverse Characteristics

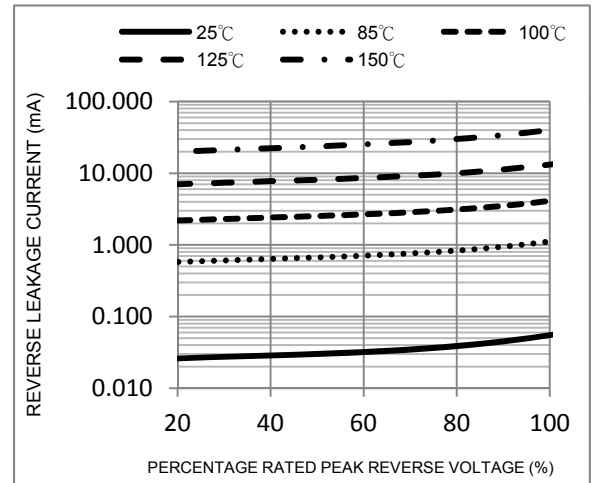
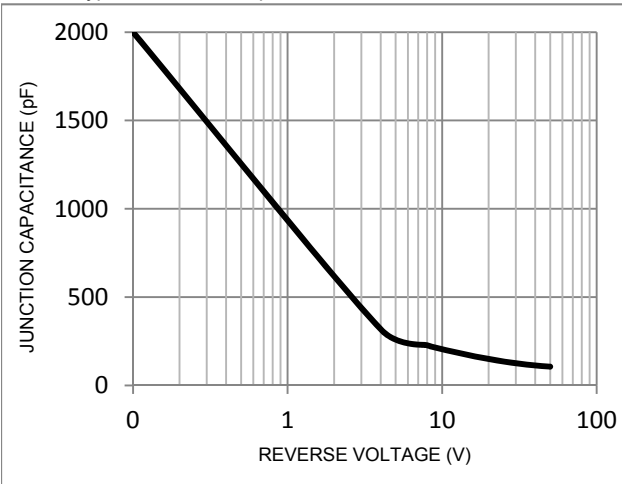
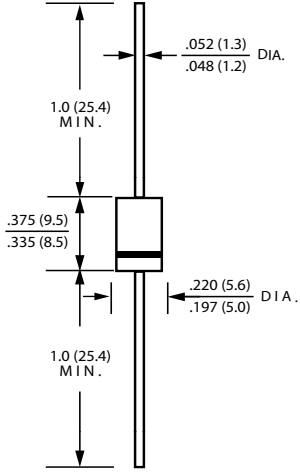


FIG. 5-Typical Junction Capacitance





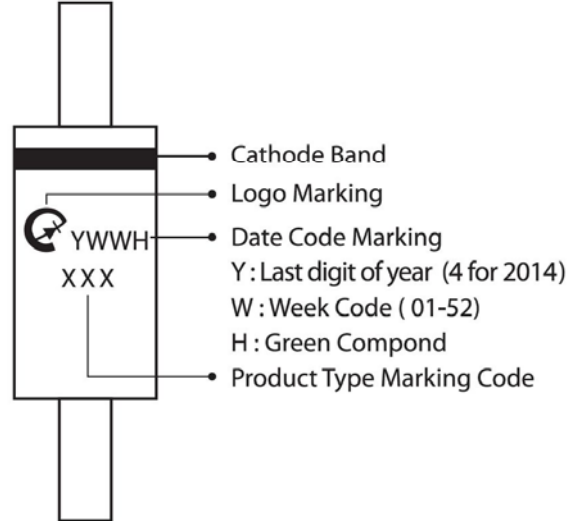
Package Outline Dimensions



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