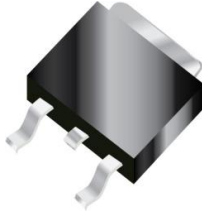




EBRP30E45CD2



Excellent Schottky Barrier Rectifiers



D2-PAK

Primary Characteristics		
I_F	30	A
V_{RRM}	45	V
I_{FSM}	200	A
V_F	0.5	V
T_J max	150	°C

Features

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

Mechanical Data

- Case: D2-PAK
- 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: 1.43 grams (approximate)

Ordering Information

Part No.	Remark	Package	Packing
EBRP30E45CD2	General	D2-PAK	800 / Reel
EBRP30E45CD2-H	Halogen Free		

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

PARAMETER	SYMBOL	EBRP30E45CD2	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 (Total) (Per Leg)	I_F	30 15	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200	A
Maximum Instantaneous Forward Voltage $I_F=3A$ @ 25°C $I_F=15A$ @ 25°C	V_F	0.34 Typ. 0.50 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	760	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 +150	°C
Marking Code		P30E45CD2 、 30E45CD2	

NOTES:

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



EBRP30E45CD2



Excellent Schottky Barrier Rectifiers

Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

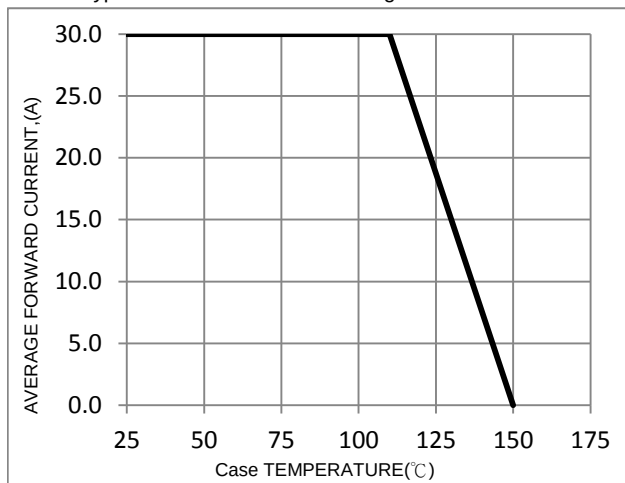


FIG. 2-Typical Forward Characteristics

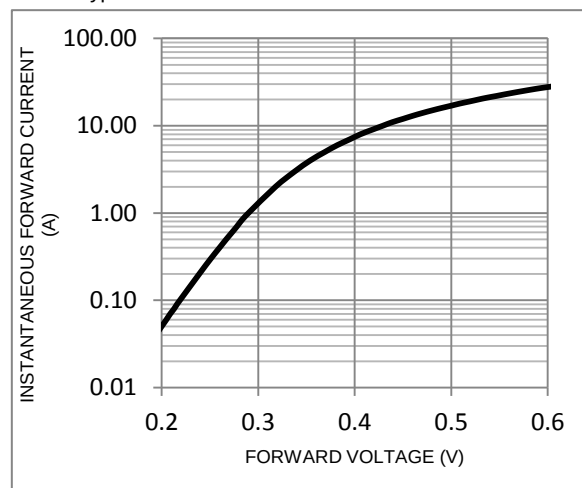


FIG. 3-Maximum Non-Repetitive Forward Surge Current

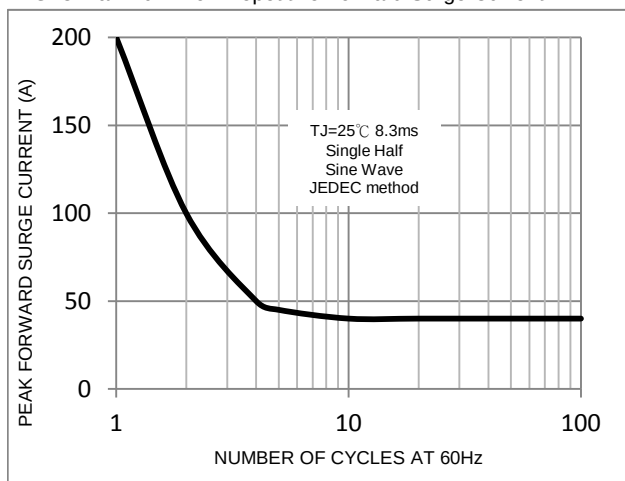


FIG. 4-Typical Reverse Characteristics

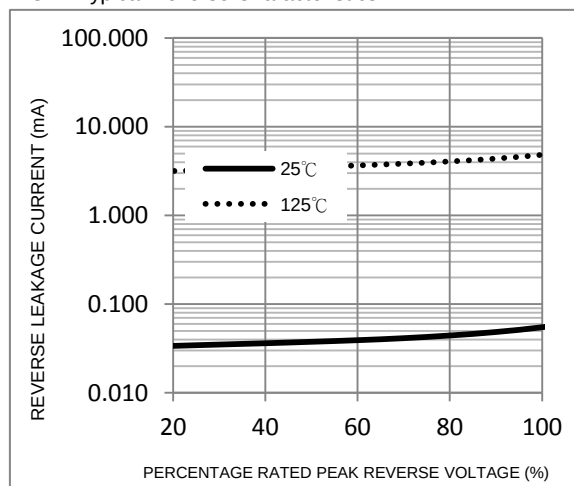
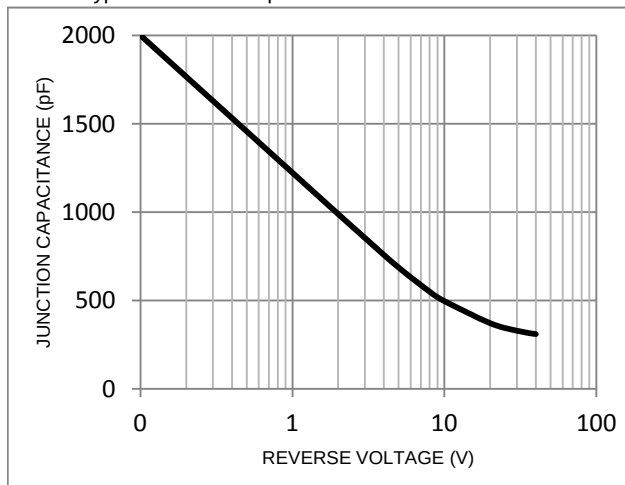


FIG. 5-Typical Junction Capacitance



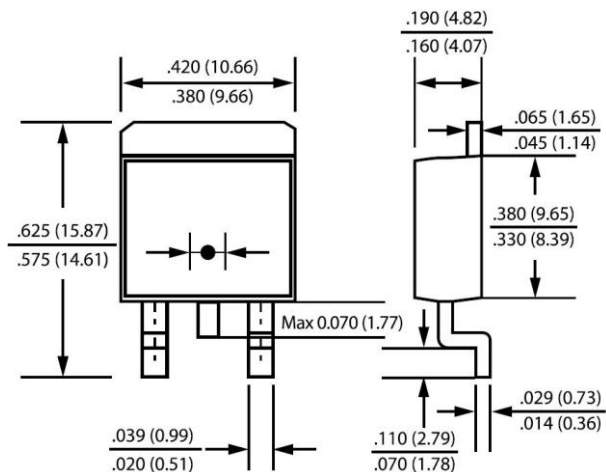


EBRP30E45CD2



**Excellent Schotthy
Barrier Rectifiers**

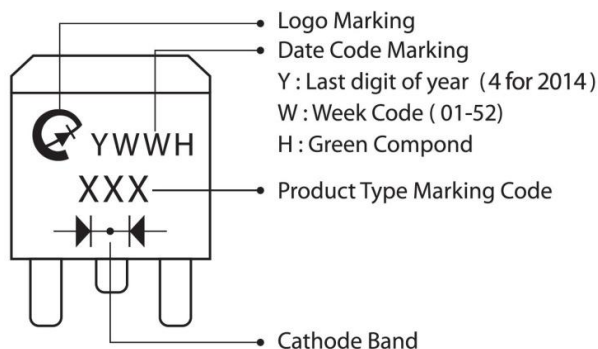
Package Outline Dimensions



D2-PAK

Dimensions in inches and (millimeters)

Marking Information



Suggested Pad Layout

Dimension	Outline	D2PAK (mm)
A		5.08
B		1.10
C		10.80
D		8.30
E		3.50
F		16.90

