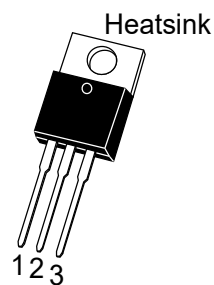


■ Productor Character

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHs Product.

■ Summarize

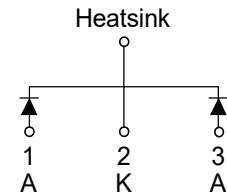
- EBR30L45CT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.



■ Primary Use

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

■ Equivalent Circuit



Package:TO-220AB

EBR30L45CT

EBR30L45CT-HF

HF=Halogen Free

Absolute Maximum Ratings

Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	V_{RRM}	45	V
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	I_{FAV}	30	A
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	I_{FSM}	280×2	A
Operating Junction Temperature	T_J	-40~150	°C
Storage Temperature	T_{STG}	-40~150	°C
Typical Thermal Resistance(per leg)	Package=TO-220AB $R_{\theta JC}$	2	°C/W

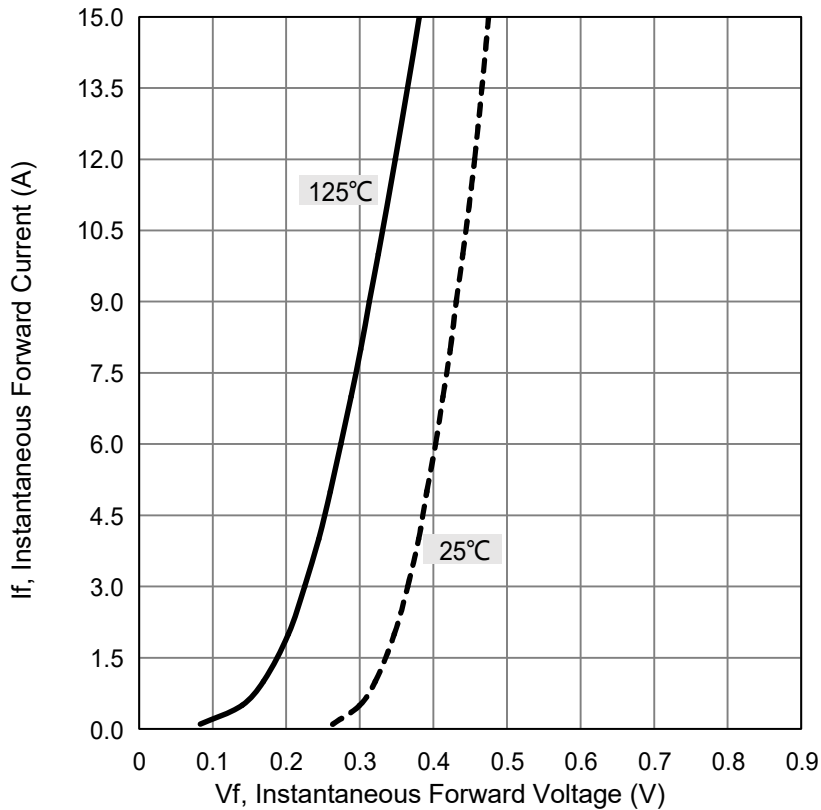
Electricity Character

Item	Test Condition		Value(min)	Value(typ)	Value(max)	Unit
V_B	$T_J = 25^{\circ}\text{C}$	$I_R = 1\text{mA}$	45	---	---	V
I_R	$T_J = 25^{\circ}\text{C}$	$V_R = 45\text{V}$	---	---	0.15	mA
	$T_J = 75^{\circ}\text{C}$	$V_R = 45\text{V}$	---	---	10.00	mA
V_F	$T_J = 25^{\circ}\text{C}$	$I_F = 15\text{A}$ ($I_{FAV} = 15\text{A} \times 2$)	---	0.48	0.53	V
	$T_J = 125^{\circ}\text{C}$		---	---	0.45	V

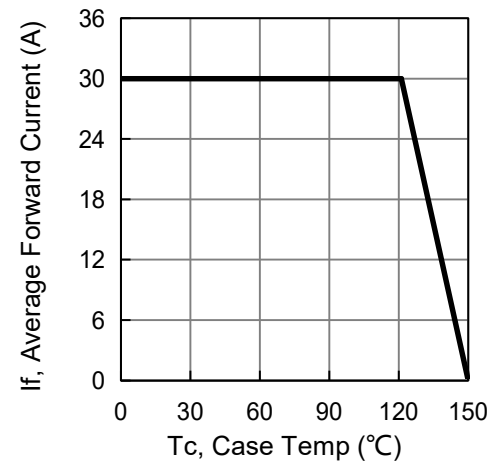


Characteristic Curves

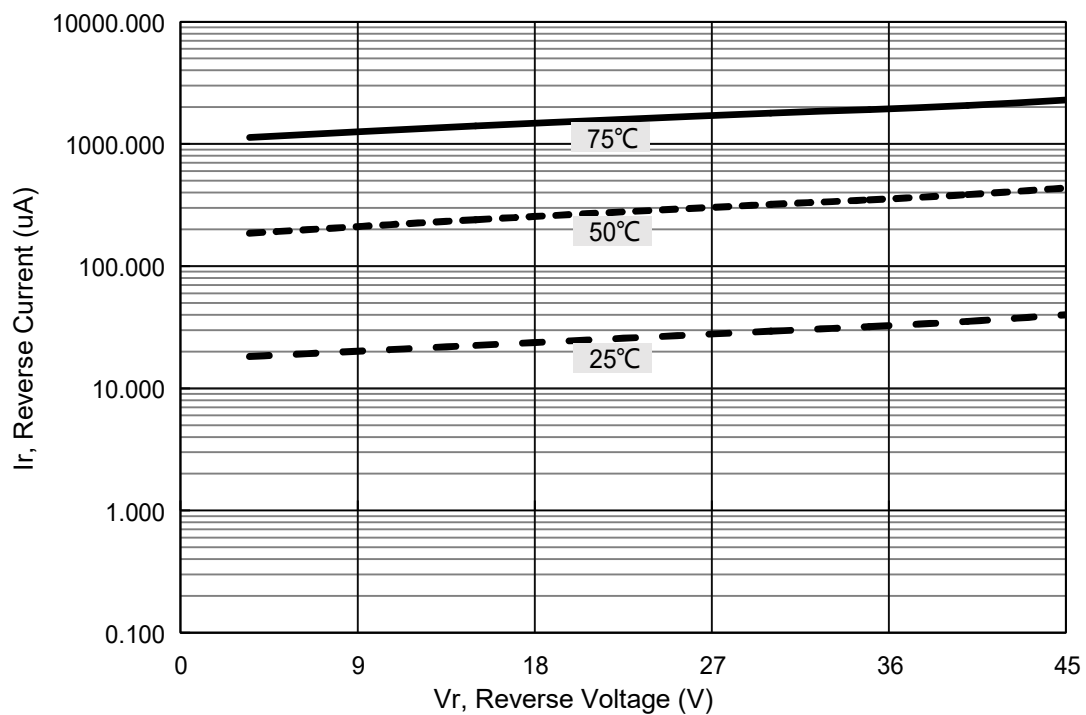
The forward voltage and forward current curve



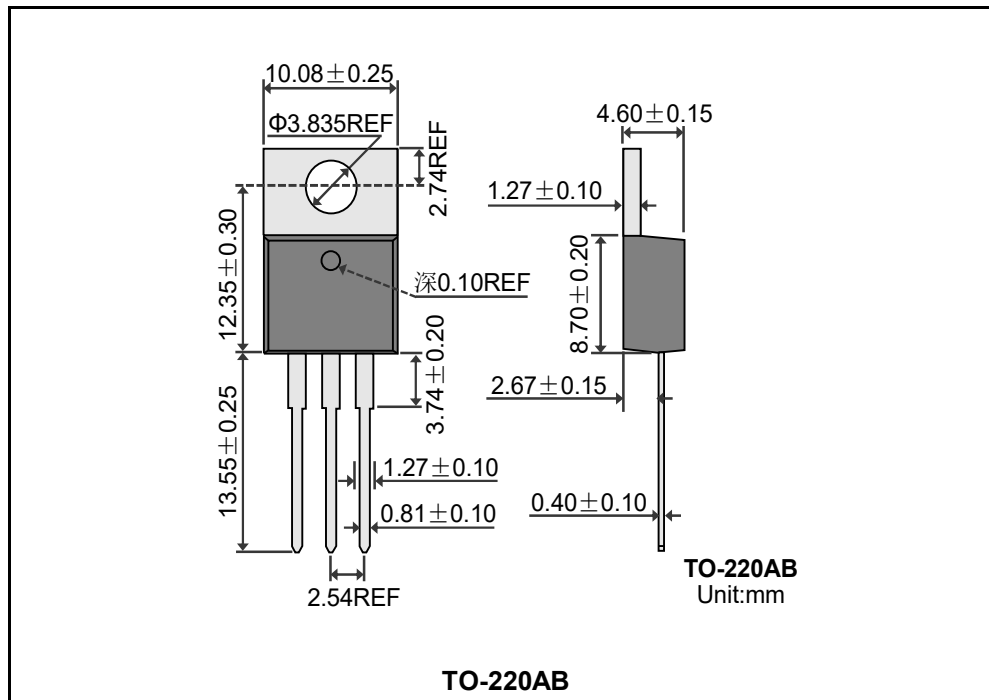
Current derating curve, per element



The reverse leak current and the reverse voltage (single-device) curve.



Package Outline Dimensions



Marking Information



“MHCHXM”= Product Logo
 “Marking Code”= The Following
 “XXXX”= Date Code Marking

Package	Marking Code	Part Number
TO-220AB	EBR30L45	EBR30L45CT
		EBR30L45CT-HF

Packing Information

Packaging	Package	Part Number	Quantity	Size
Tube	TO-220AB	Tube	50 pieces	530*33*7mm
		Inner Box	1000 pieces	558*150*40mm
		Outer Box	5000 pieces	570*235*170mm

Notice:

Jiangsu Mhchxm Electronics Technology Co.Ltd.,have the right to modify the specification revision, all information are subject to change without notice.

