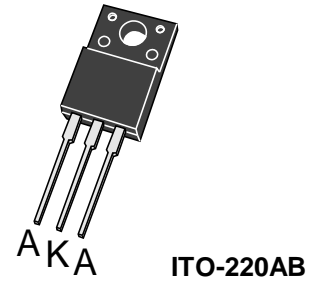


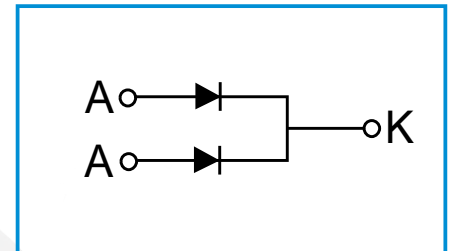
## Schottky Barrier Rectifiers

### Features

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHs Product.
- Marking:MBRT30100F



Functional Diagram



### Applications

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

### Maximum Ratings ( Ta=25 unless otherwise noted )

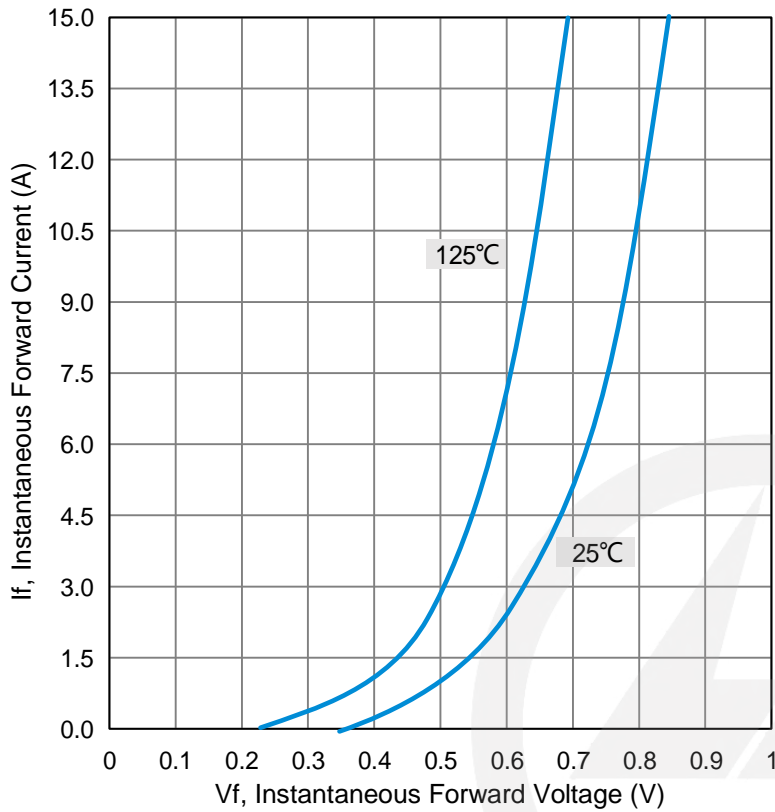
Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	$V_{RRM}$	100	V
*Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	$I_{FAV}$	30	A
Forward Peak Surge Current(Rated Load 8.3ms Half sine Wave-According to JEDEC Method)	$I_{FSM}$	350×2	A
Operating Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-40~150	°C
Typical Thermal Resistance(per leg)	Package=ITO-220AB	$R_{\theta JC}$	4 °C/W

### Electrical characteristics ( Ta=25 unless otherwise specified )

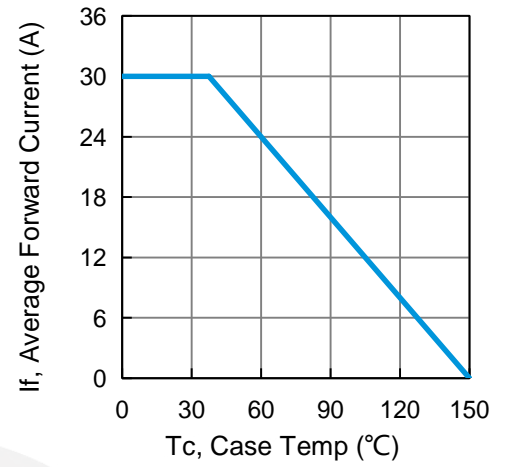
Item	Test Condition		Value(min)	Value(typ)	Value(max)	Unit
$V_B$	$T_J = 25^{\circ}C$	$I_R = 1mA$	100	---	---	V
$I_R$	$T_J = 25^{\circ}C$	$V_R = 100V$	---	---	0.01	mA
	$T_J = 125^{\circ}C$	$V_R = 100V$	---	---	10.00	mA
$V_F$	$T_J = 25^{\circ}C$	$I_F = 15A$	---	0.83	0.85	V
	$T_J = 125^{\circ}C$	$(I_{FAV} = 15A \times 2)$	---	---	0.75	V

## Typical Characteristics

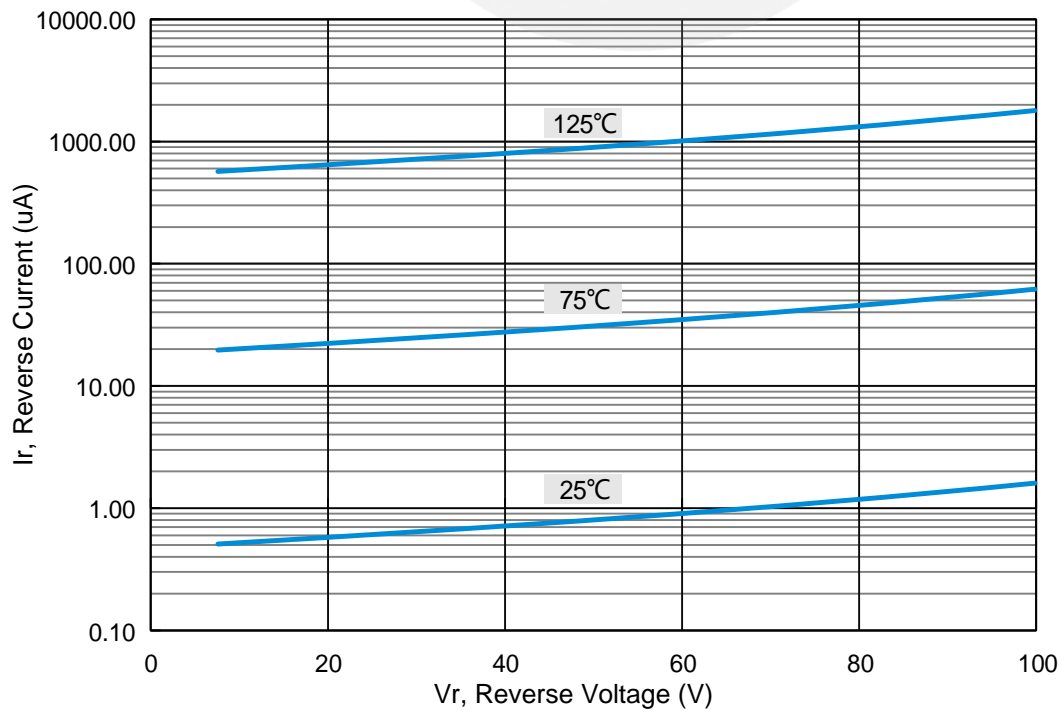
The forward voltage and forward current curve

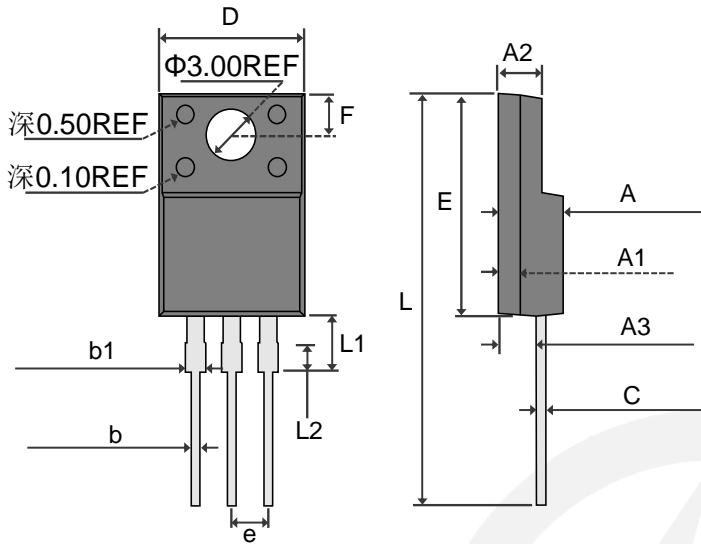


Current derating curve, per element



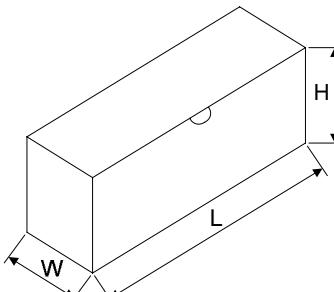
The reverse leak current and the reverse voltage (single-device) curve.



**ITO-220AB Package Outline**


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	4.30	4.70
A1	1.30 REF.	
A2	2.50	2.90
A3	2.50	2.90
b	0.50	0.75
b1	1.10	1.35
C	0.50	0.75
D	9.96	10.36
E	14.70	15.30
e	2.54 TYP.	
F	2.70 REF.	
$\Phi$	3.00 REF.	
L	28.00	28.68
L1	2.70	3.10
L2	1.00	1.18

**Packaging**

Box 	L	578.0±5.0
	W	215.0±5.0
	H	185.0±5.0
	Quantity: 5000PCS	