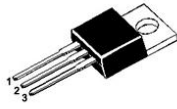
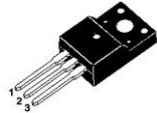


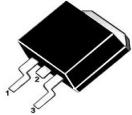
LOW VF SCHOTTKY RECTIFIER



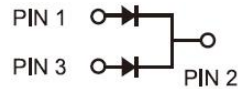
TO-220AB/CT



ITO-220/FCT



TO-263



FEATURES



Lead Free Package and Finish

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_O	2*15A
V_{RRM}	100V
I_{FSM}	220A
V_F	0.63V
T_{jmax}	150°C
Assembly code	X X

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum,10s per JESD 22-

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Total	30	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	I_{FSM}	220	A
Operating Temperature Range	T_J	-50 to +150	°C
Storage Temperature Range	T_{STG}	-50 to +150	°C
Typical Thermal Resistance (Note1) TO-220AB,TO-263 ITO-220	$R_{\theta JC}$	2	°C/W
		4	

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V _F	Typ.	Max.	V
at I _F =5A	TA=25°C		0.50	-	
	TA=125°C		0.44	-	
at I _F =10A	TA=25°C		0.58	0.66	
	TA=125°C		0.56	-	
at I _F =15A	TA=25°C		0.67	0.73	
	TA=125°C		0.63	-	
Maximum Reverse Current at V _R =100V	TA=25°C		I _R	10	
	TA=125°C		8	-	mA

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

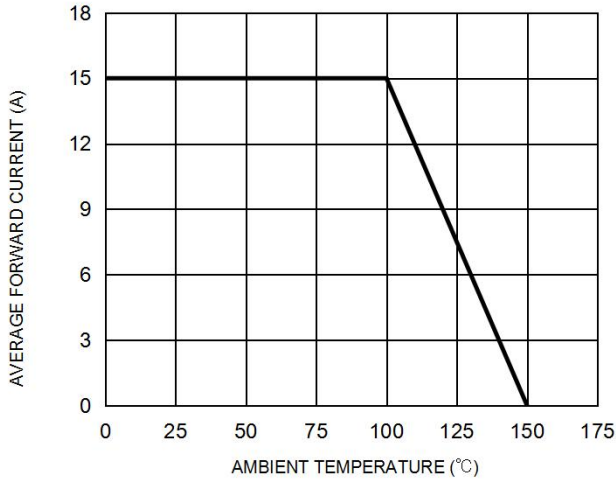


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

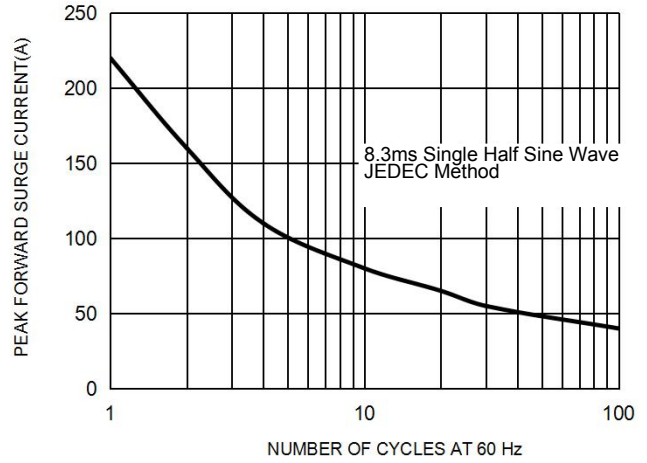


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

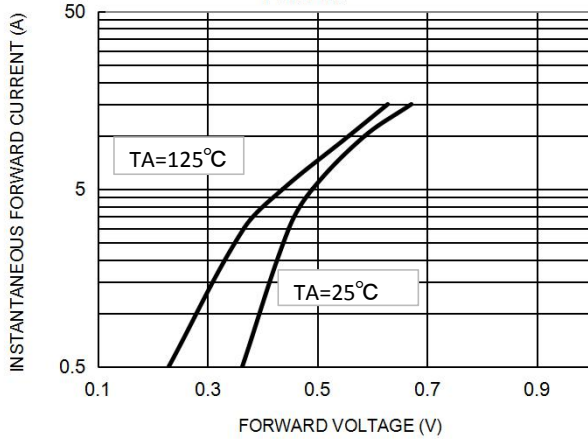
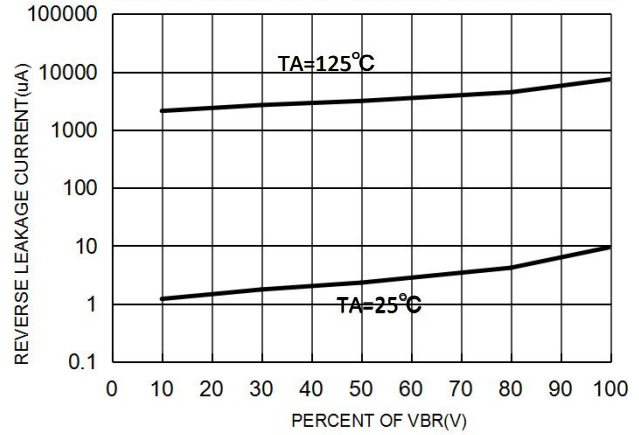


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



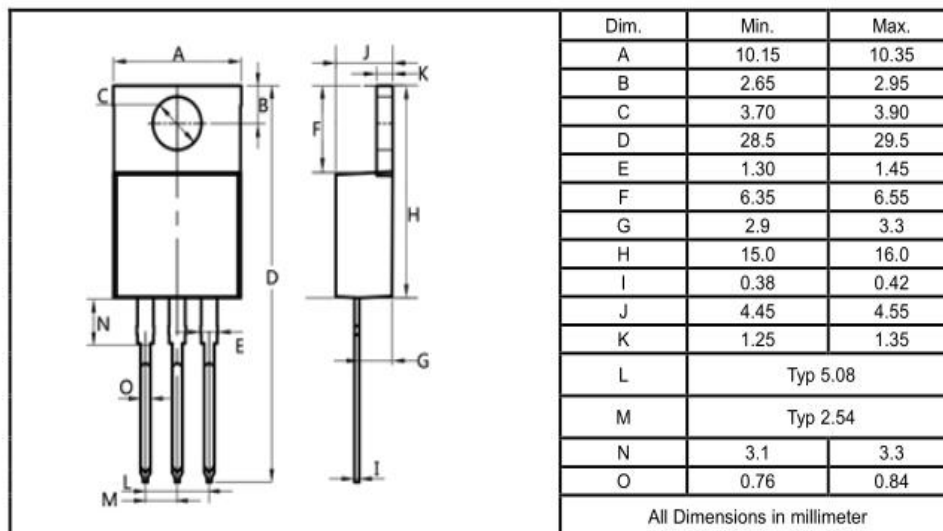
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR30100VCT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBRF30100VCT	ITO-220	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBRS30100VCT	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton

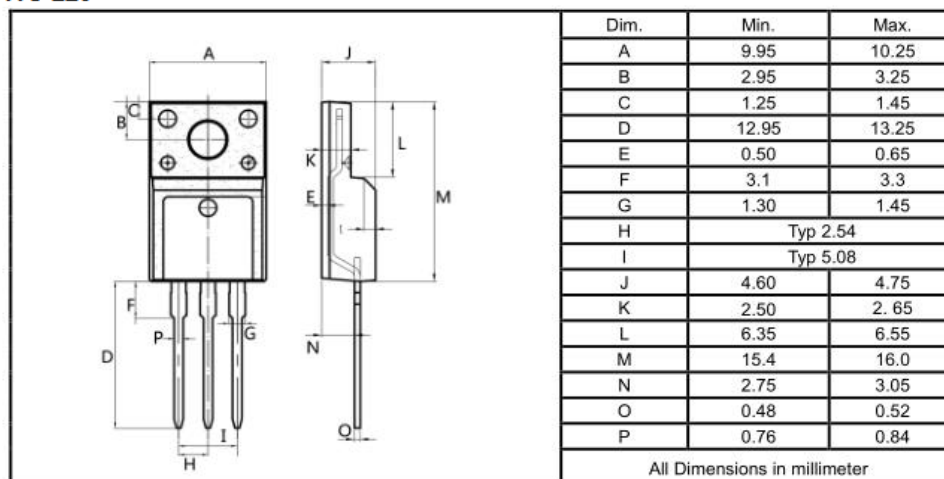
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AB



ITO-220



TO-263

