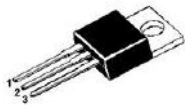


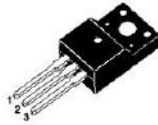


# MBR20100CT/FCT/DC/CS

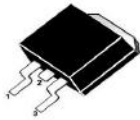
## SCHOTTKY BARRIER RECTIFIER



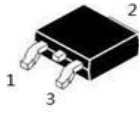
TO-220AB/CT



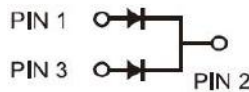
TO-220F/FCT



TO-263/DC



TO-252/CS



### FEATURES

- 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*10A
$V_{RRM}$	100V
$I_{FSM}$	250A
$V_F$	0.68V
$T_{j,max}$	150°C
Assembly code	AL

### 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	10	A
	Total	20	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250	A
Operating Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-40 to +150	°C
Typical Thermal Resistance (Note1) TO-220AB, TO-263, TO-252	$R_{\theta JC}$	2	°C/W
		4	

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

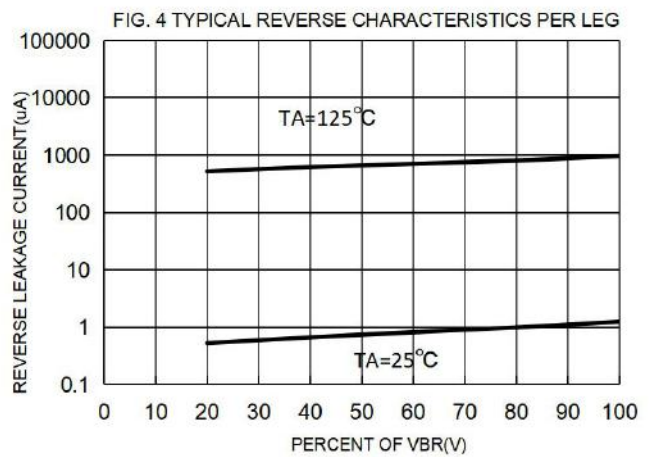
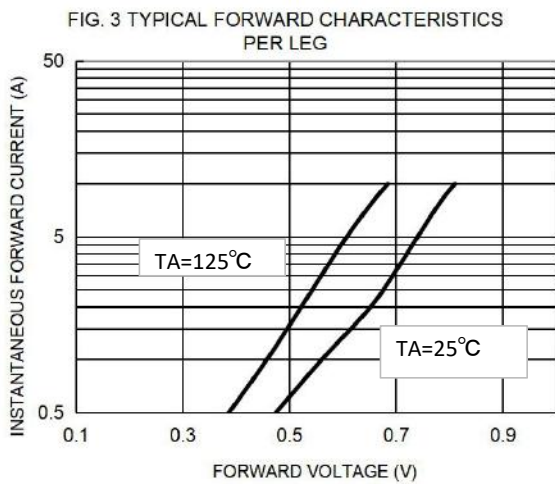
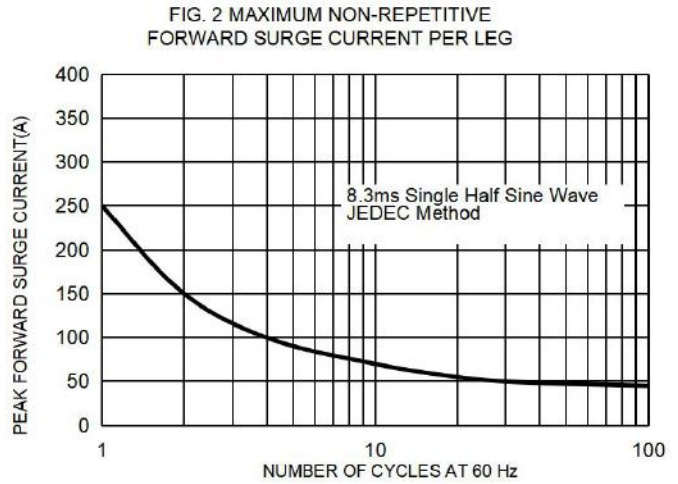
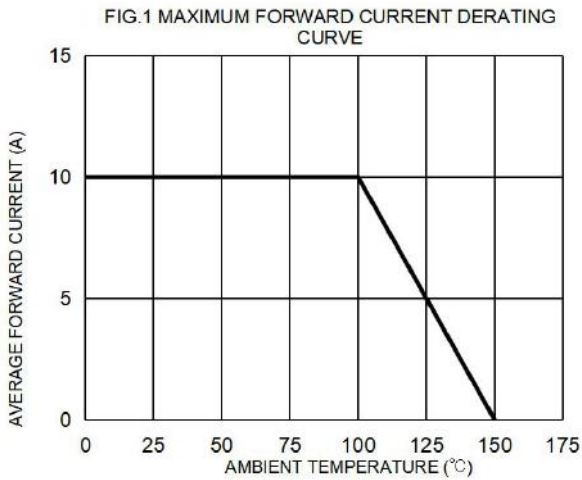
### Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit
Forward Voltage Drop(Note2)	$V_F$	Typ.	Max.	V
		at $I_F=3A$	0.69	
	TA=125°C	0.60	-	
at $I_F=5A$	TA=25°C	0.74	-	
	TA=125°C	0.61	-	
at $I_F=10A$	TA=25°C	0.82	0.85	
	TA=125°C	0.68	-	
Maximum Reverse Current at $V_R=100V$	$I_R$	TA=25°C	10	
		TA=125°C	1	mA

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



## RATINGS AND CHARACTERISTIC CURVES

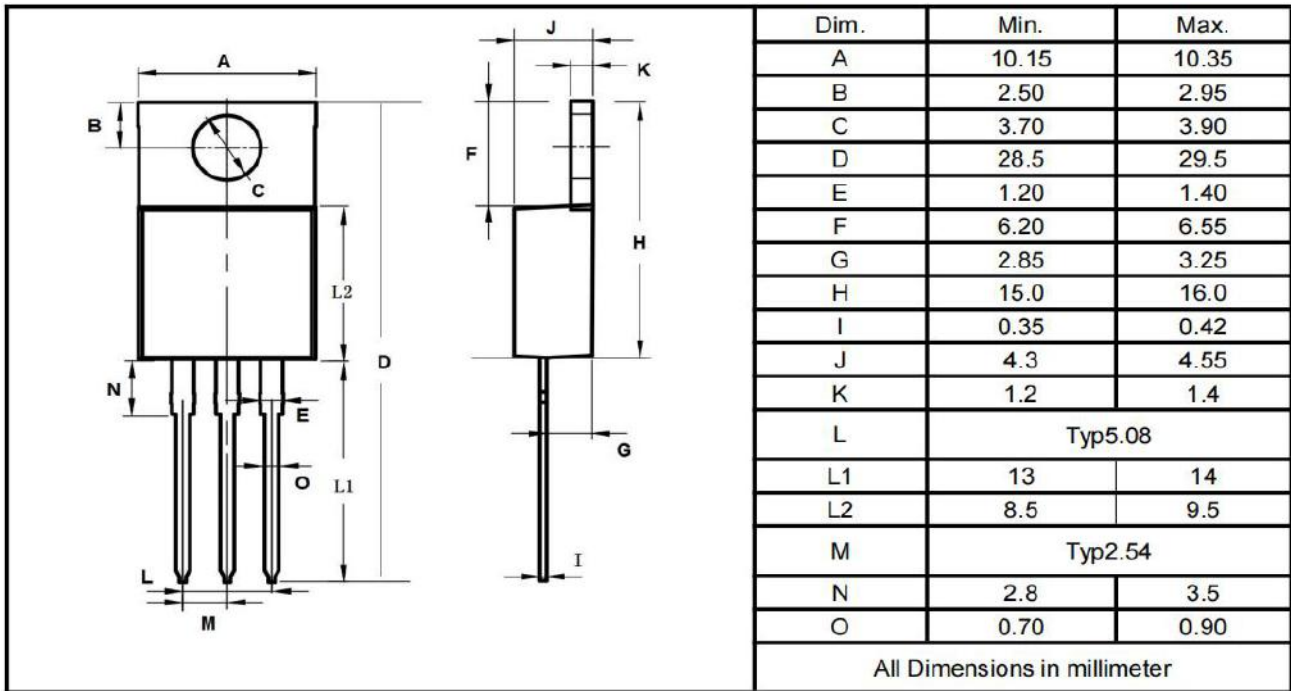




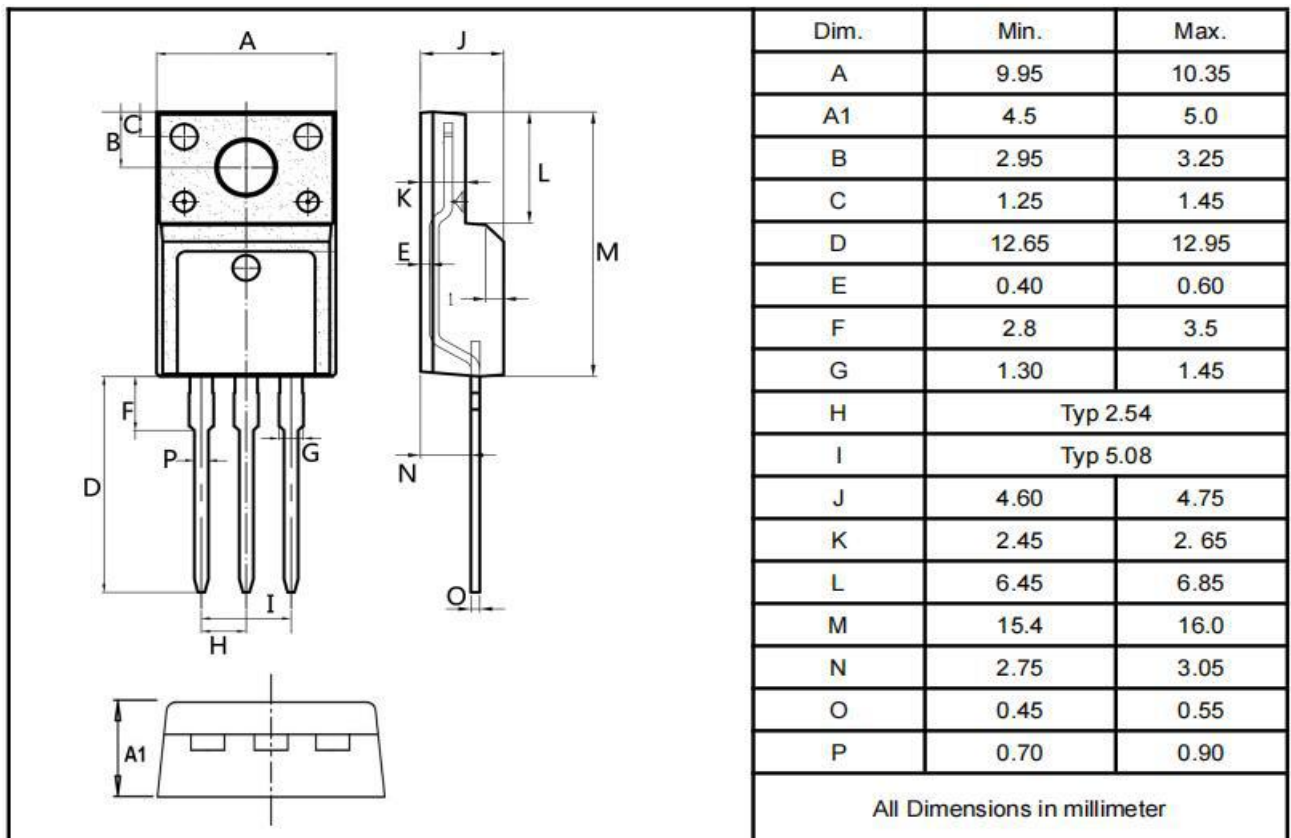
# MBR20100CT/FCT/DC/CS

## Package Outline Dimensions millimeters

TO-220AB



TO-220F

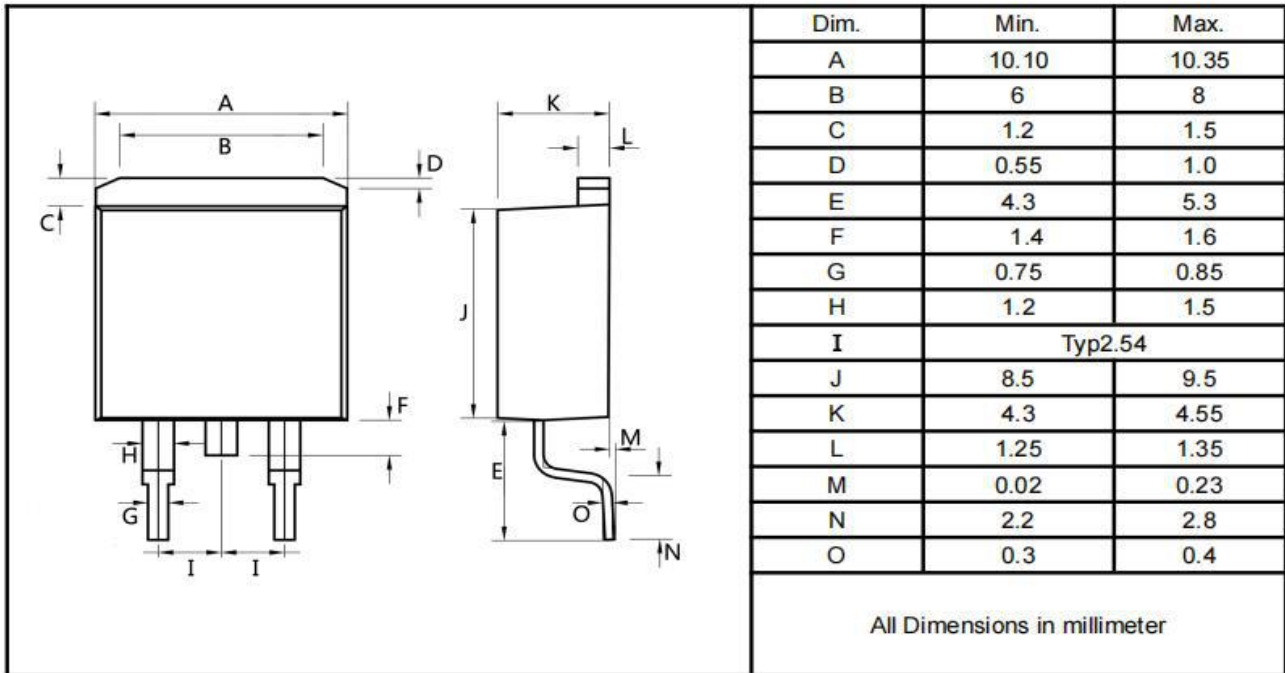




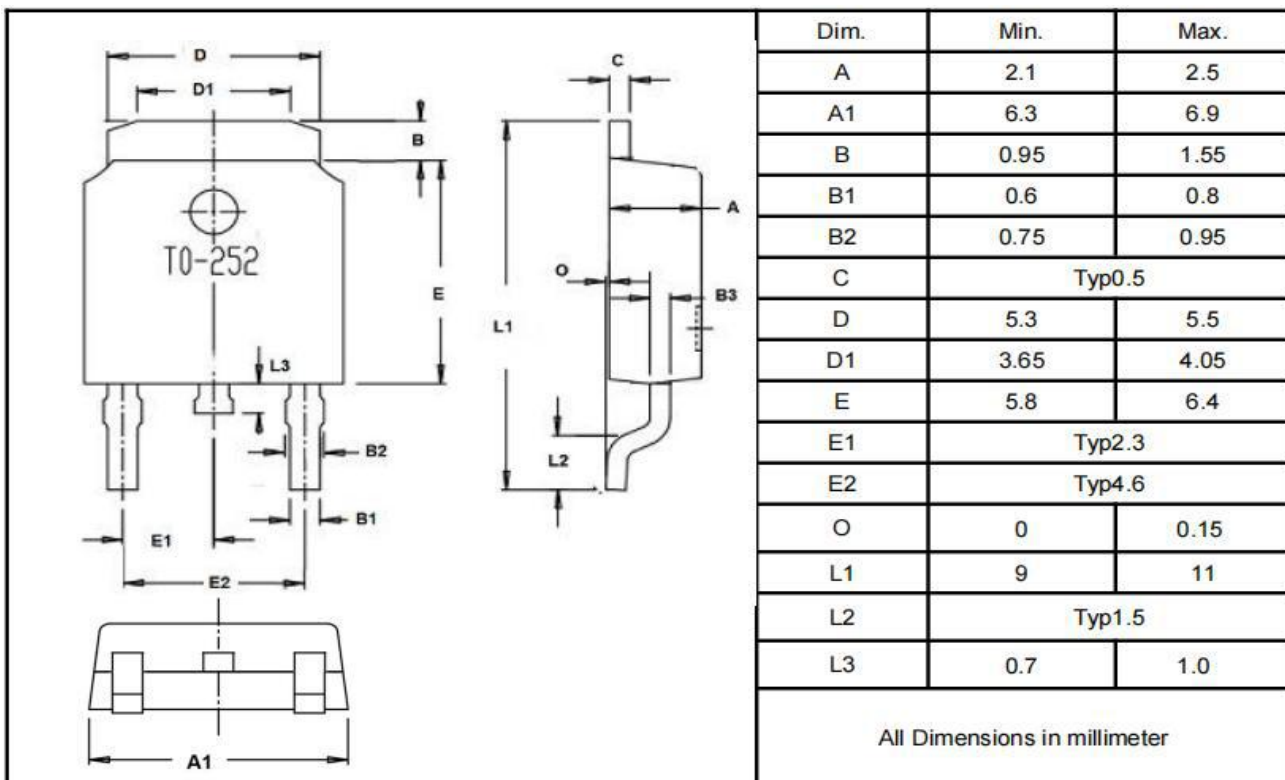
# MBR20100CT/FCT/DC/CS

## Package Outline Dimensions millimeters

T0-263



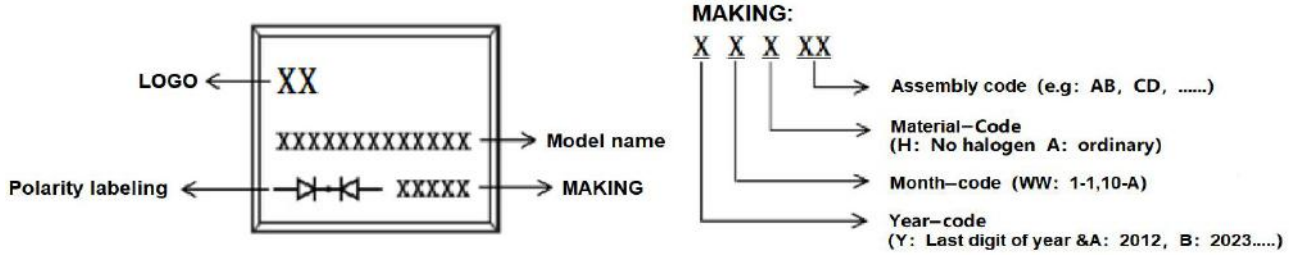
T0-252





# MBR20100CT/FCT/DC/CS

## Marking on the body



## Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR20100CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton
MBR20100CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton

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

## packing instruction

PKG	最小包装	内盒	外箱
TO-220AB TO-220F TO-263			
	50pcs/管	1000pcs/盒	5000pcs/箱
TO-263-R			
	800pcs/盘	1600pcs/盒	8000pcs/箱
TO-252			
	2500pcs/盘	5000pcs/盒	25000pcs/箱

### Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.