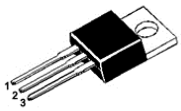
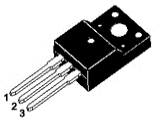
MBR1060CT/FCT/DC/CS

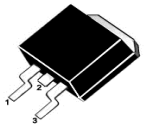
SCHOTTKY BARRIER RECTIFIER



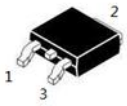
TO-220AB/CT



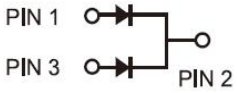
TO-220F/FCT



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 freqency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_O	2*5A
V_{RRM}	60V
I_{FSM}	190A
V_F	0.59V
$T_J$max	125℃

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℃ maximum,10s per JESD 22-B106

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

Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	60	V
Working Peak Reverse Voltage		V_{RWM}	60	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current	Per Leg	I_O	5	A
	Total		10	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave		I_{FSM}	190	A
Operating Temperature Range		T_J	125	°C
Storage Temperature Range		T_{STG}	-40 to +125	°C
Typical Thermal Resistance (Note1) TO-220AB,TO-263,TO-252 TO-220F		$R_{\theta JC}$	 2 4	°C/W

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=2A	TA=25°C		0.53	-	
	TA=125°C		0.45	-	
at I_F=3A	TA=25°C		0.58	-	
	TA=125°C		0.50	-	
at I_F=5A	TA=25°C		0.66	0.75	
	TA=125°C		0.56	-	
Maximum Reverse Current at V_R=60V	TA=25°C	I_R	2	50	μA
	TA=125°C		1.5	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

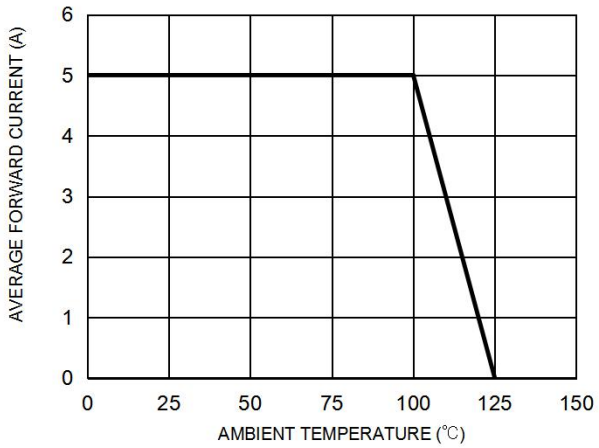


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

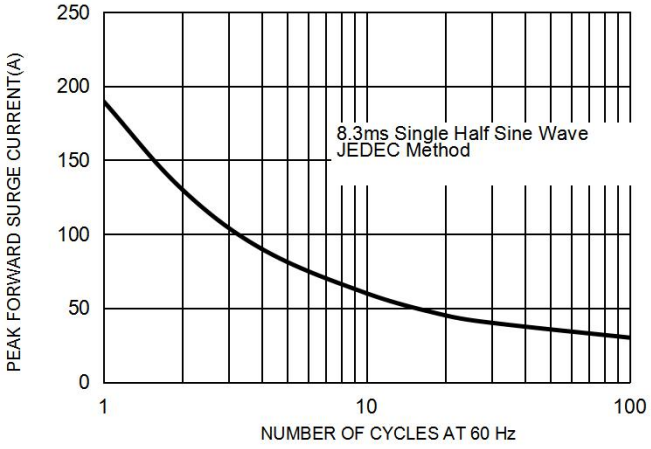


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

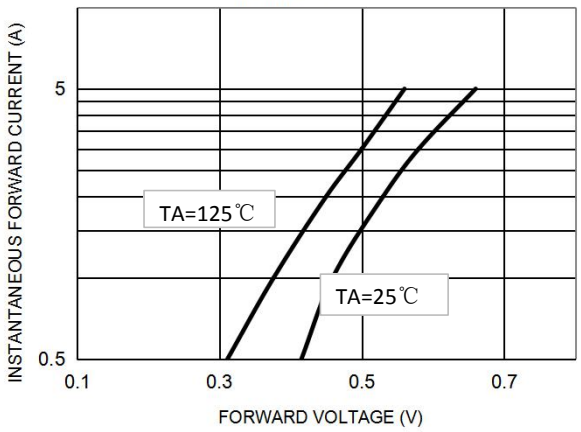
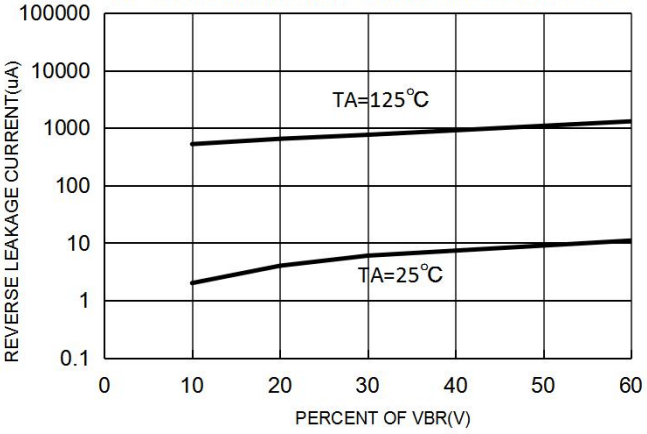


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



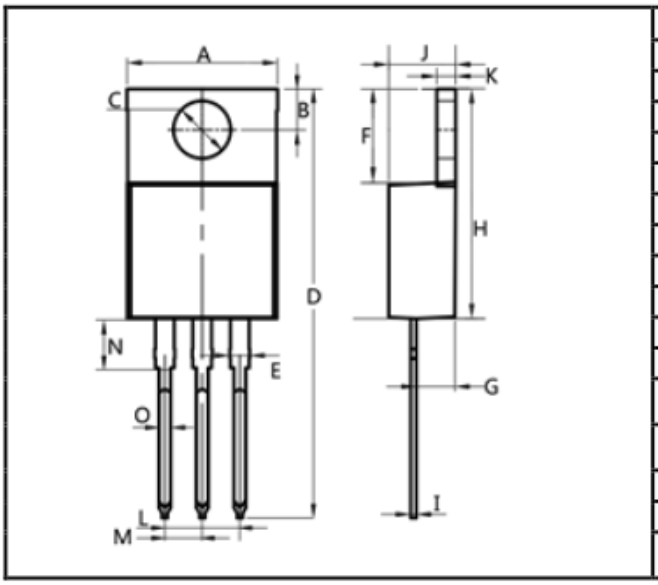
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR1060CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR1060FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR1060DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR1060DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton
MBR1060CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	2500pcs/box 12500pcs/carton

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

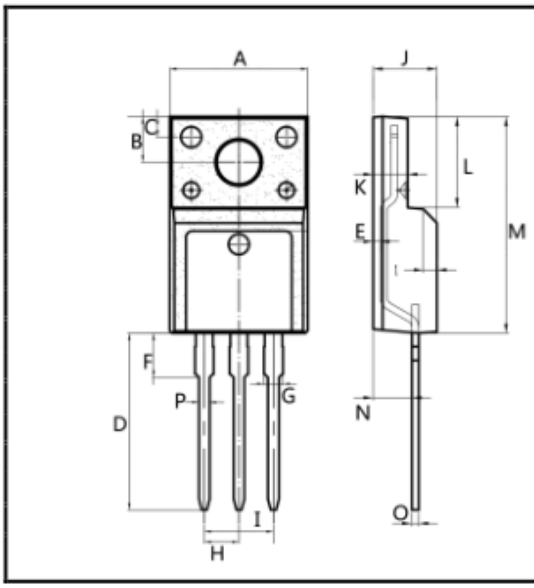
Package Outline Dimensions millimeters

TO-220AB



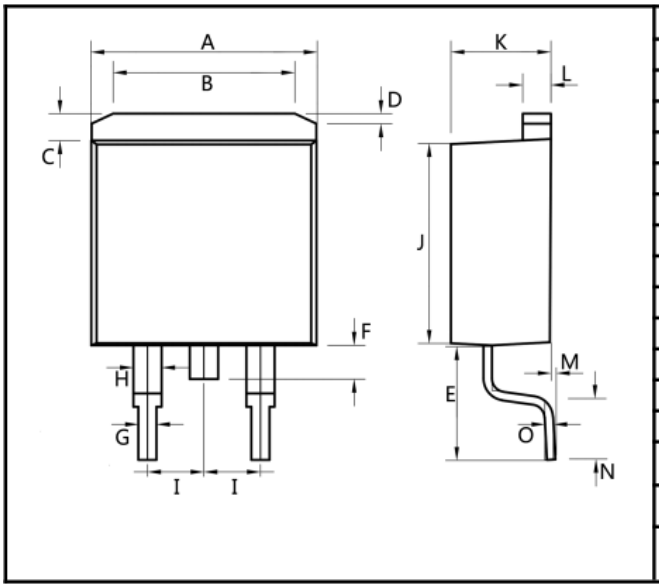
Dim.	Min.	Max.
A	10.15	10.35
B	2.65	2.95
C	3.70	3.90
D	28.5	29.5
E	1.30	1.45
F	6.35	6.55
G	2.9	3.3
H	15.0	16.0
I	0.38	0.42
J	4.45	4.55
K	1.25	1.35
L	Typ 5.08	
M	Typ 2.54	
N	3.1	3.3
O	0.76	0.84
All Dimensions in millimeter		

TO-220F



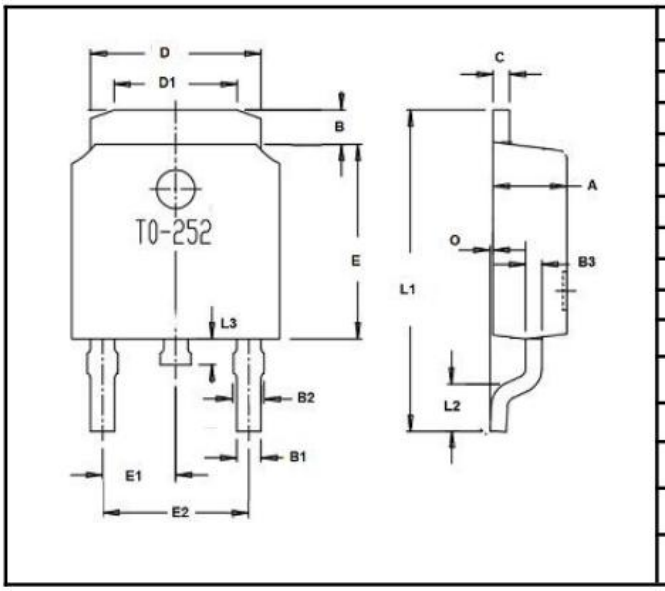
Dim.	Min.	Max.
A	9.95	10.25
B	2.95	3.25
C	1.25	1.45
D	12.95	13.25
E	0.50	0.65
F	3.1	3.3
G	1.30	1.45
H	Typ 2.54	
I	Typ 5.08	
J	4.60	4.75
K	2.50	2. 65
L	6.35	6.55
M	15.4	16.0
N	2.75	3.05
O	0.48	0.52
P	0.76	0.84
All Dimensions in millimeter		

TO-263



Dim.	Min.	Max.
A	10.15	10.35
B	6	8
C	1.2	1.5
D	0.55	1.0
E	4.3	5.3
F	1.4	1.6
G	0.75	0.85
H	1.2	1.5
I	Typ2.54	
J	8.5	9.5
K	4.3	4.55
L	1.25	1.35
M	0.02	0.23
N	2.2	2.8
O	0.35	0.45
All Dimensions in millimeter		

TO-252



Dim.	Min.	Max.
A	2.15	2.45
B	0.96	1.42
C	Typ0.5	
D	5.33	5.53
D1	3.65	4.05
E	6.0	6.2
E1	Typ2.29	
E2	Typ4.58	
B1	0.74	0.86
B2	0.74	0.94
O	0	0.15
L1	9.9	10.5
L2	Typ1.65	
L3	0.6	1.0
All Dimensions in millimeter		