

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 45 V

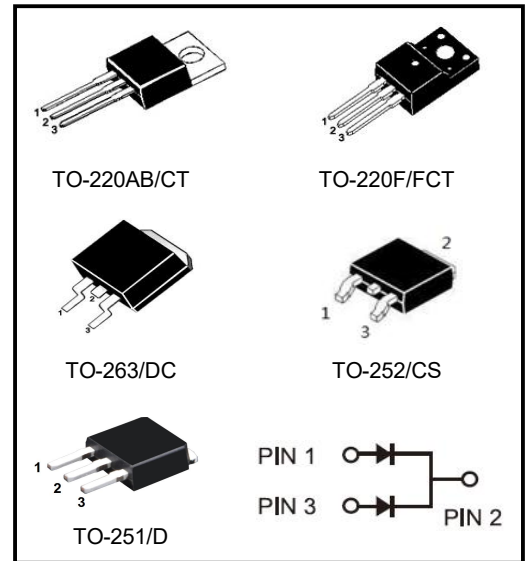
Forward Current - 30 A

FEATURES

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

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 JESD22-106



Primary Characteristic

I_o	2*15A
V_{RRM}	45V
I_{FSM}	300A
V_F	0.58V
T_J Max	150°C

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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Maximum RMS voltage	V_{RMS}	31.5	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	Per Leg	15	A
	Total	30	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	300	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40~ +150	°C
Typical Thermal Resistance (Note1) TO-220AB,TO-263, TO-252,TO-251 TO-220F	$R_{\theta JA}/ R_{\theta JC}$	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)		Typ.	Max.	V
		0.48	-	
at $I_F=5A$		0.40	-	V
		0.56	0.61	
at $I_F=10A$		0.51	-	V
		0.63	0.70	
at $I_F=15A$		0.58	-	V
		13	50	
Maximum Reverse Current at $V_R=45V$		3	-	μA
				mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

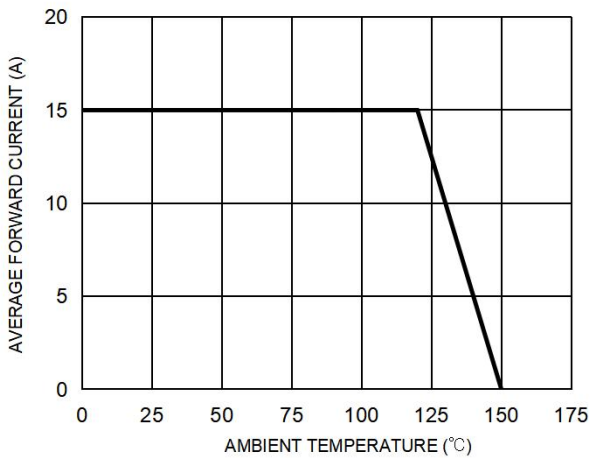


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

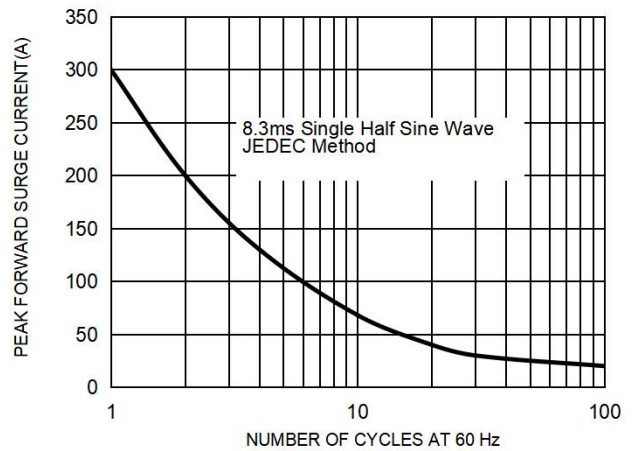


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

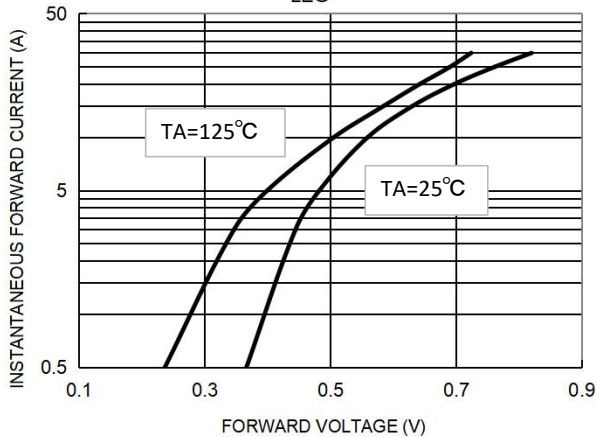
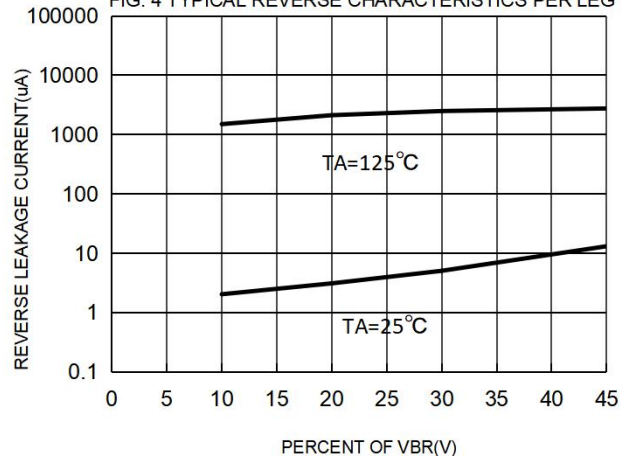
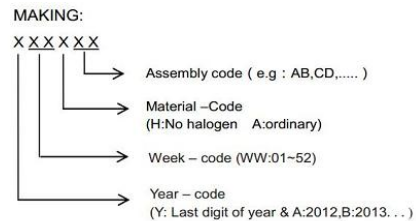
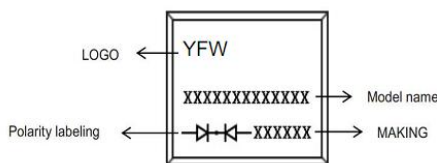


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



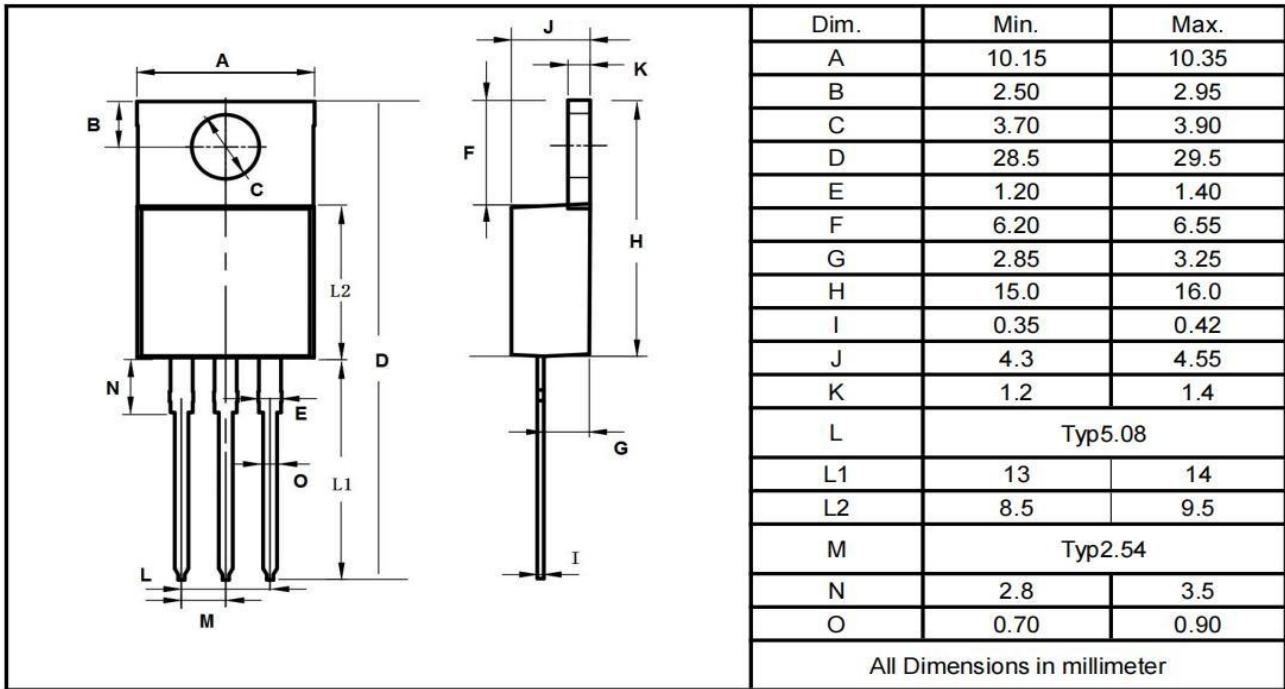
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR3045CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR3045FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR3045DC-G	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR3045DC	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton
MBR3045CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton
MBR3045D	TO-251	0.011oz(0.32g)	80 pcs / tube	4000pcs/box 24000pcs/carton

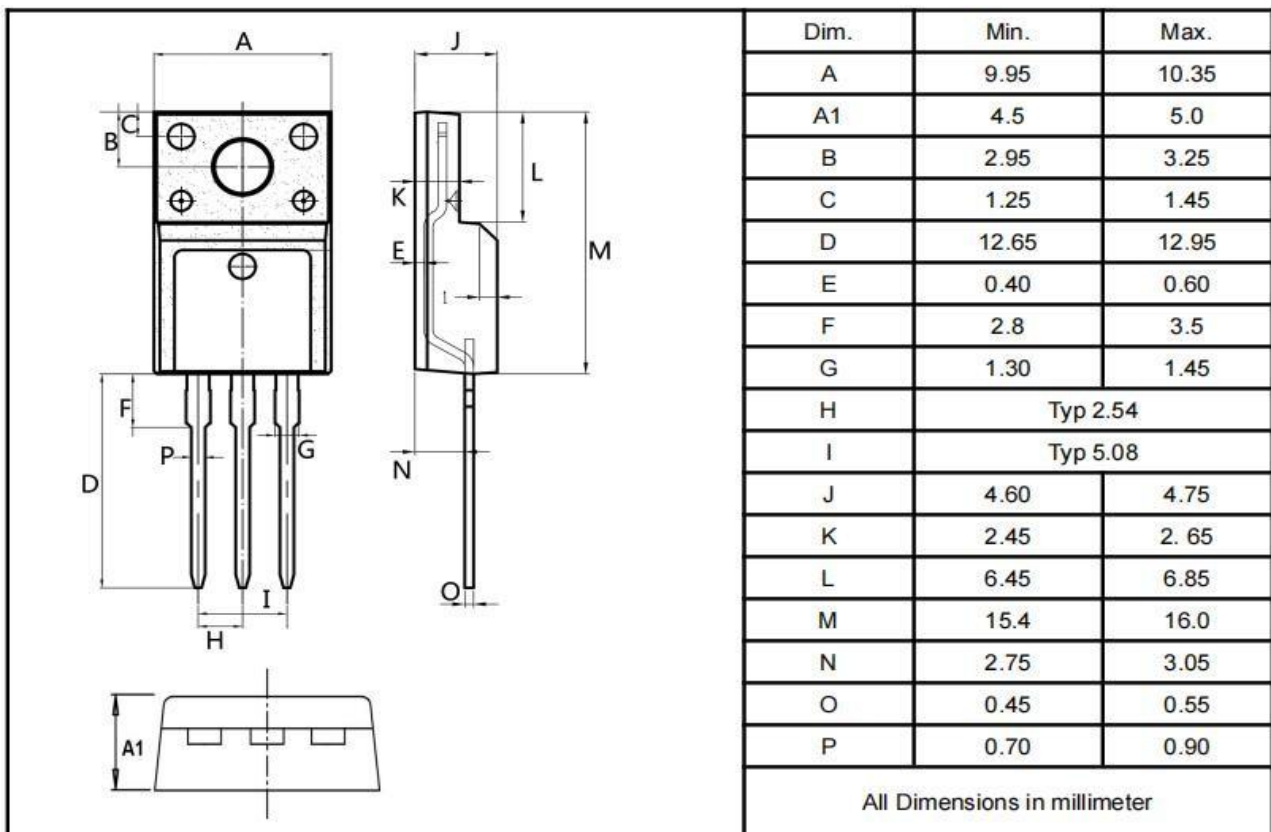
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

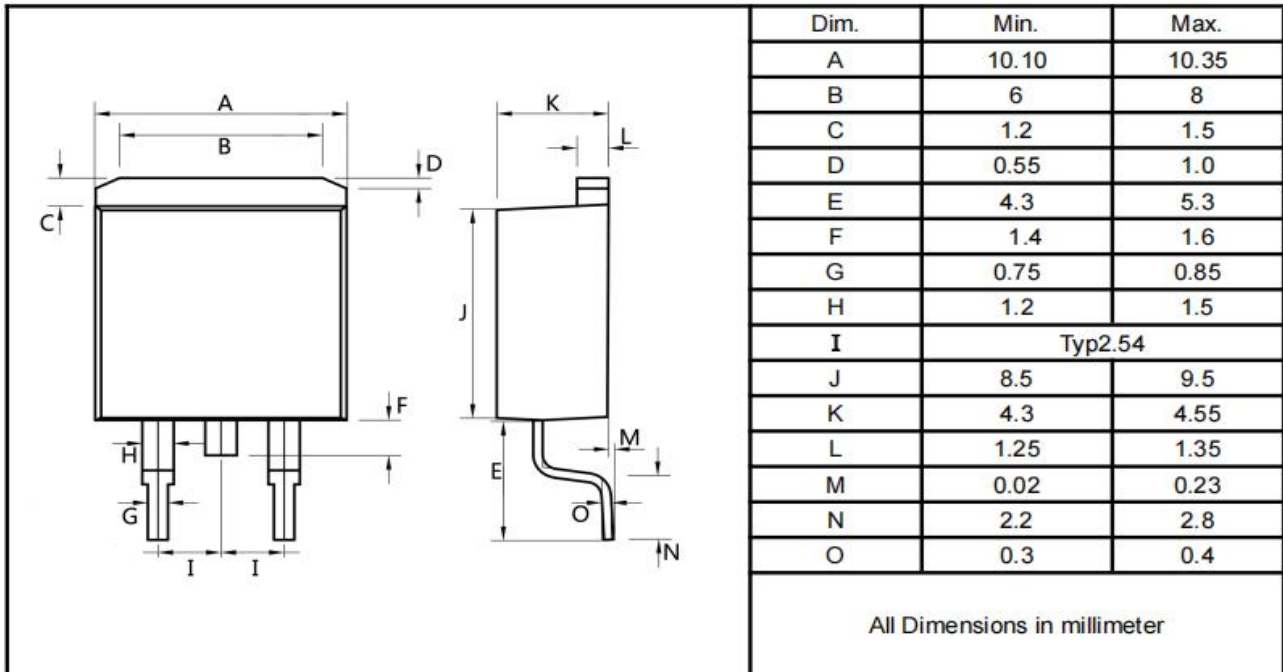
TO-220AB



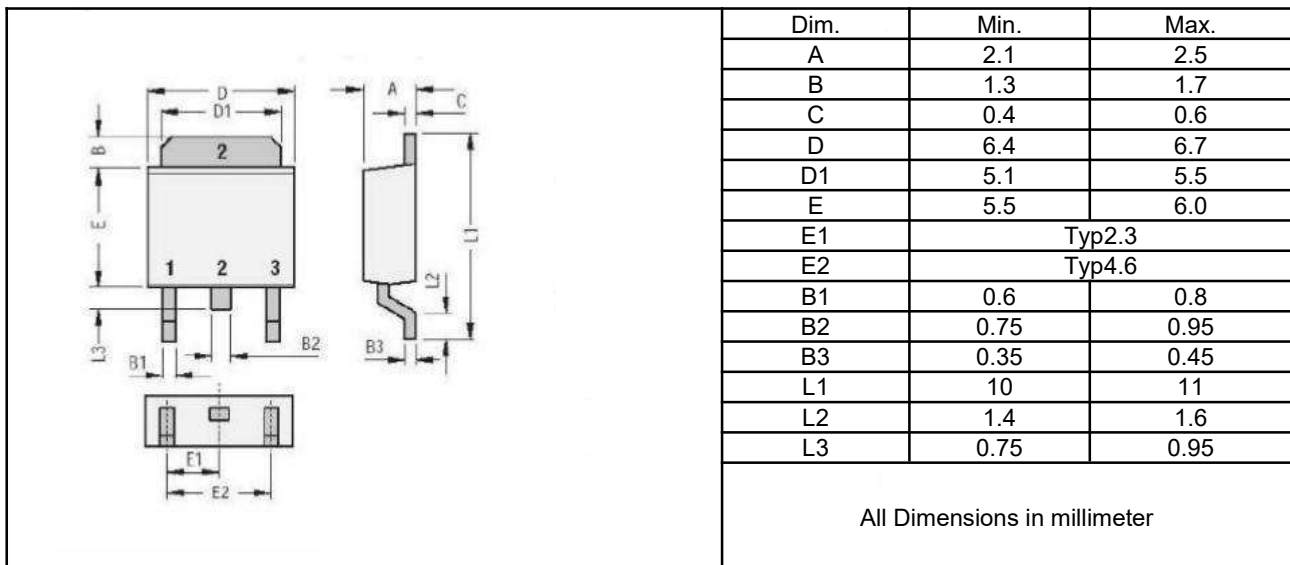
TO-220F



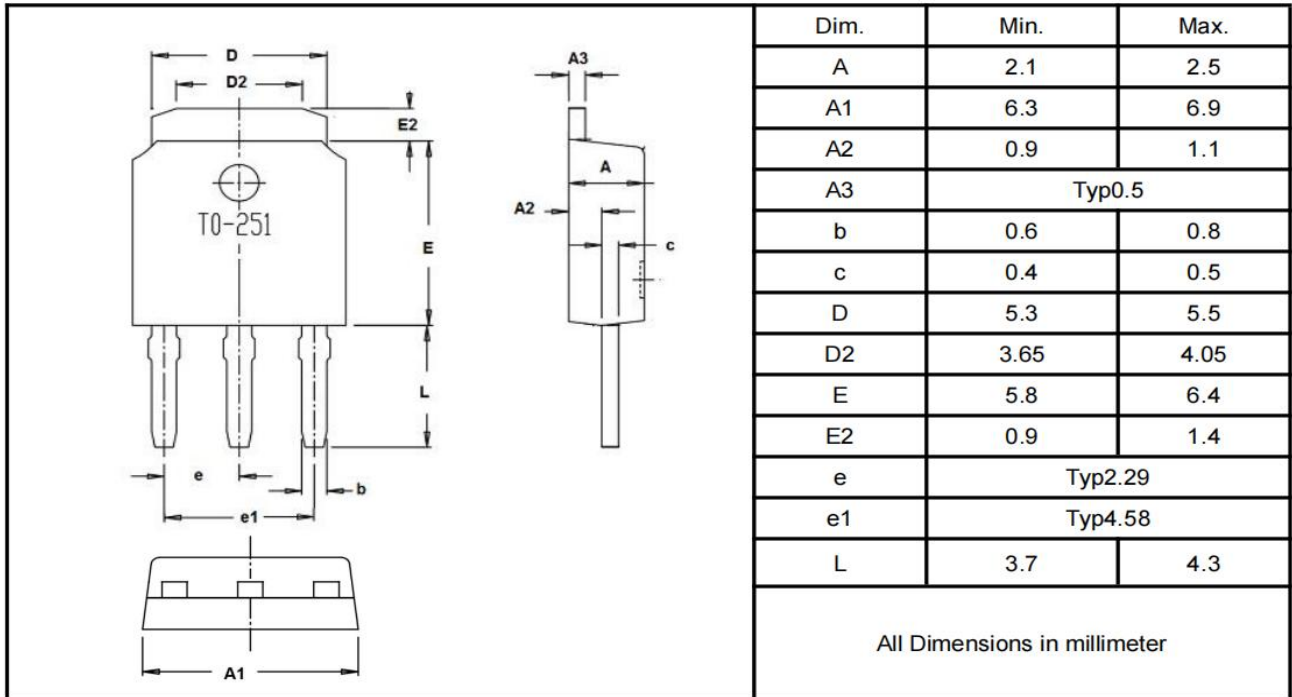
TO-263



TO-252



TO-251



单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)