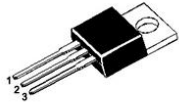
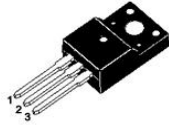




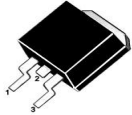
SBM30L45CT/FCT/DC LOW VF SCHOTTKY RECTIFIER



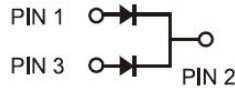
TO-220AB/CT



TO-220F/FCT



TO-263/DC



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*15A
V_{RRM}	45V
I_{FSM}	250A
V_F	0.47V
T_{jmax}	150°C

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}	45	V
Working Peak Reverse Voltage	V_{RWM}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	Per Leg	I_O	15
		Total	30
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	I_{FSM}	250	A
Operating Temperature Range	T_J	-50 to +150	°C
Storage Temperature Range	T_{STG}	-50 to +150	°C
Typical Thermal Resistance (Note 1) TO-220AB,TO-263 TO-220F	$R_{\theta JC}$	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)		Typ.	Max.	V	
		at $I_F=5A$	TA=25°C		0.38
	TA=125°C	0.31	-		
at $I_F=10A$	TA=25°C	0.44	0.48		
	TA=125°C	0.39	-		
at $I_F=15A$	TA=25°C	0.49	0.53		
	TA=125°C	0.47	-		
Maximum Reverse Current at $V_R=45V$	I_R	TA=25°C	35		µA
		TA=125°C	12		mA

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



SBM30L45CT/FCT/DC

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

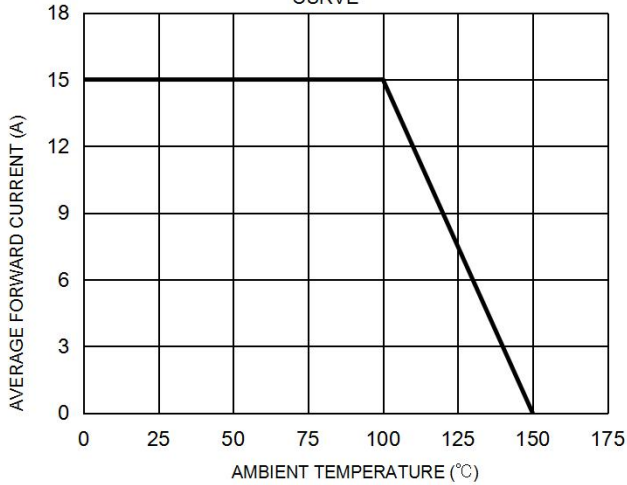


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

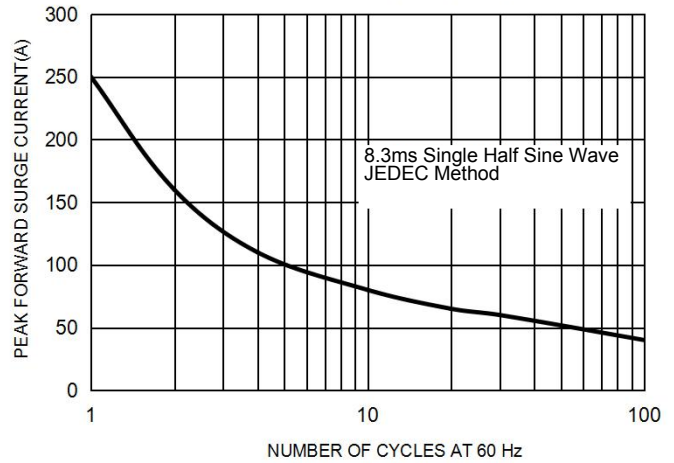


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

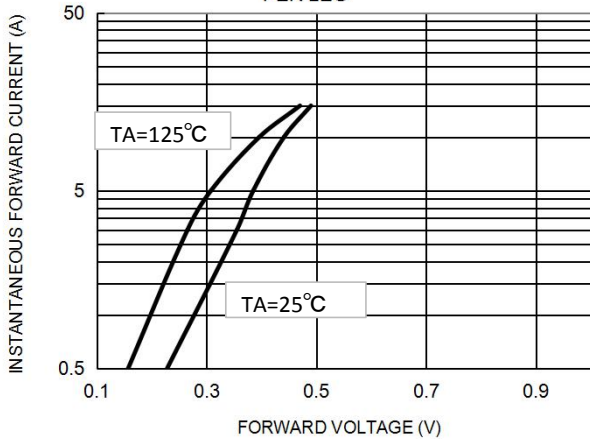
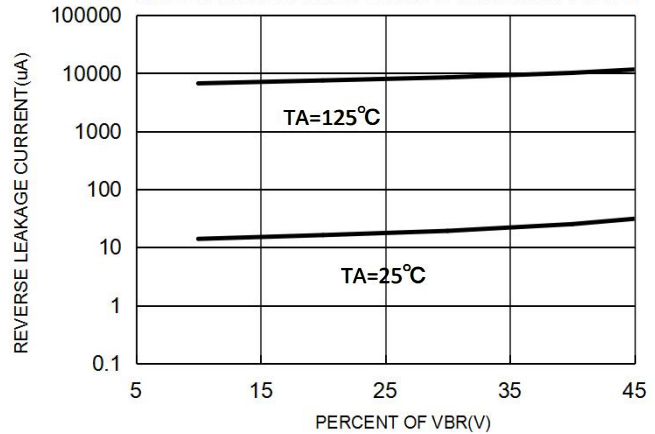
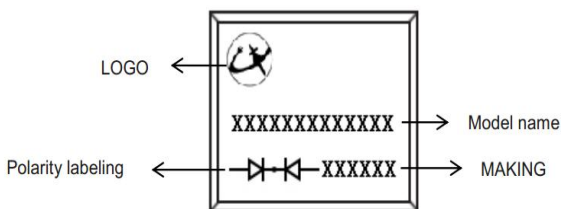


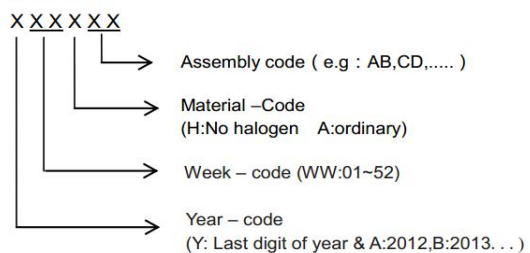
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SBM30L45CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBM30L45FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBM30L45DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBM30L45DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton

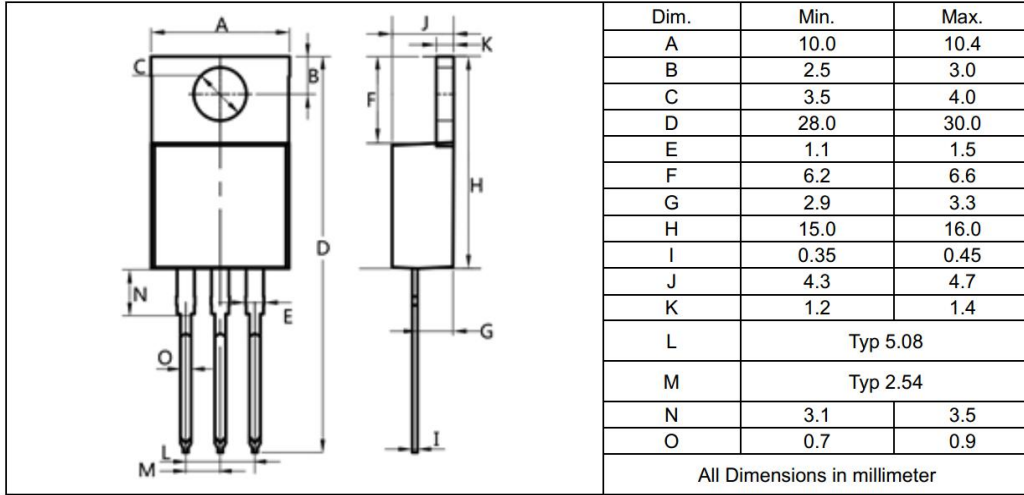
Note: For Halogen Free molding compound, add "H" suffix to part number above.



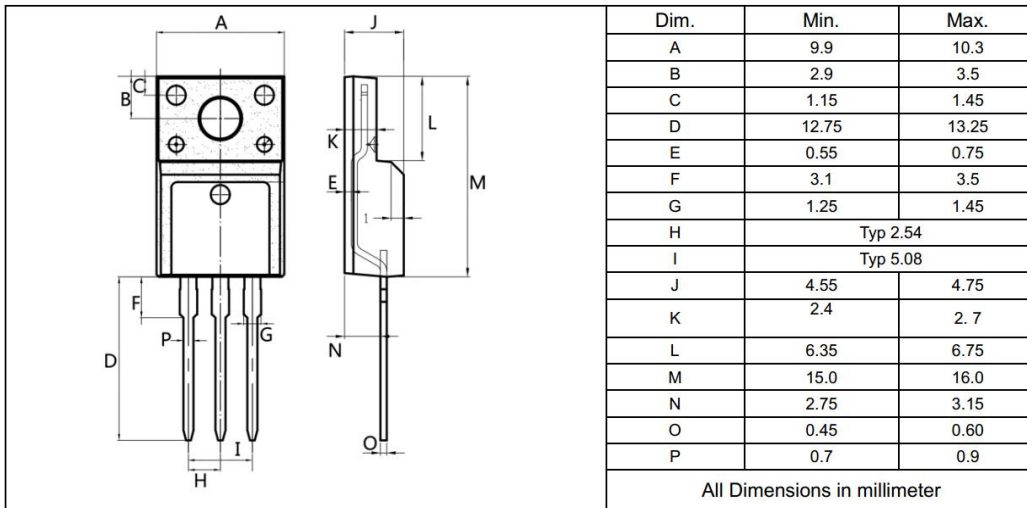
SBM30L45CT/FCT/DC

Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

