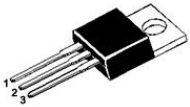
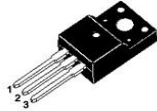


SBT10L100SCT/FCT/DC/CS

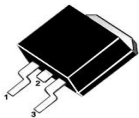
LOW VF SCHOTTKY RECTIFIER



TO-220AB/SCT



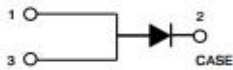
TO-220F/SFCT



TO-263/SDC



TO-252/SCS



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	10A
V_{RRM}	100V
I_{FSM}	160A
V_F	0.62V
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-B106

Maximum Ratings 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	I_O	10	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	I_{FSM}	160	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,TO-252	$R_{\theta JC}$	2	°C/W
TO-220F		4	

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

Electrical Characteristics unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at $I_F=3A$	TA=25°C		0.49	-	
	TA=125°C		0.43	-	
at $I_F=5A$	TA=25°C		0.55	0.58	
	TA=125°C		0.51	-	
at $I_F=10A$	TA=25°C		0.67	0.70	
	TA=125°C		0.62	-	
Maximum Reverse Current at $V_R=100V$	TA=25°C		I_R	5	
	TA=125°C	5		-	mA

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

SBT10L100SCT/FCT/DC/CS

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

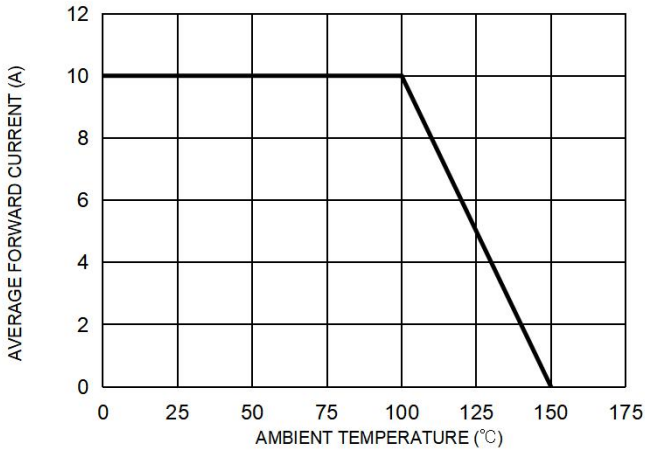


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

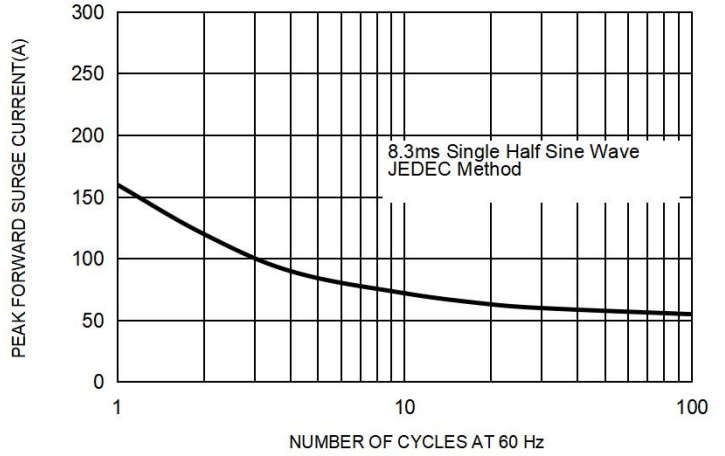


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

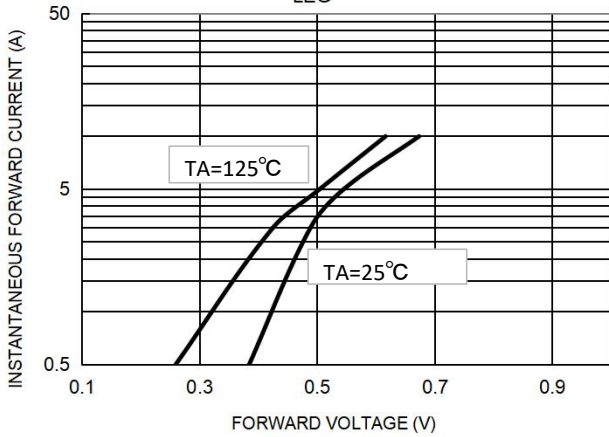
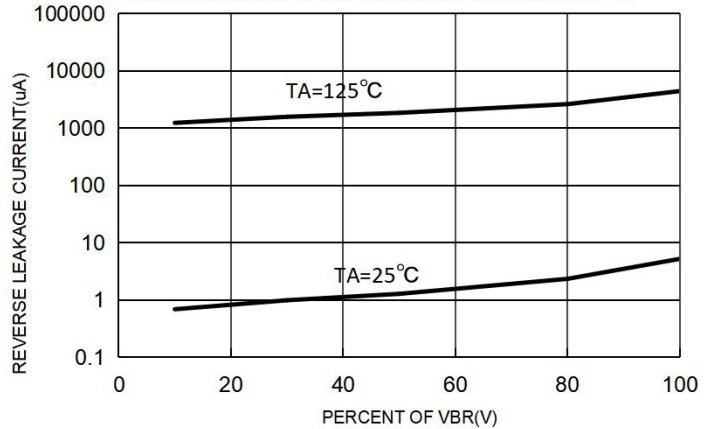
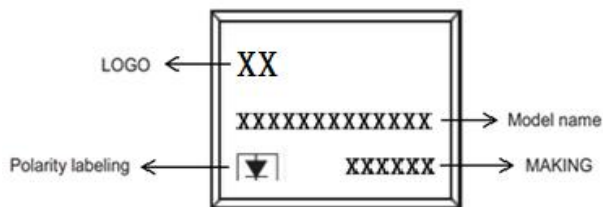


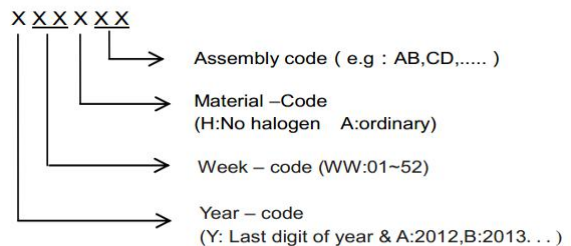
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



Ordering information

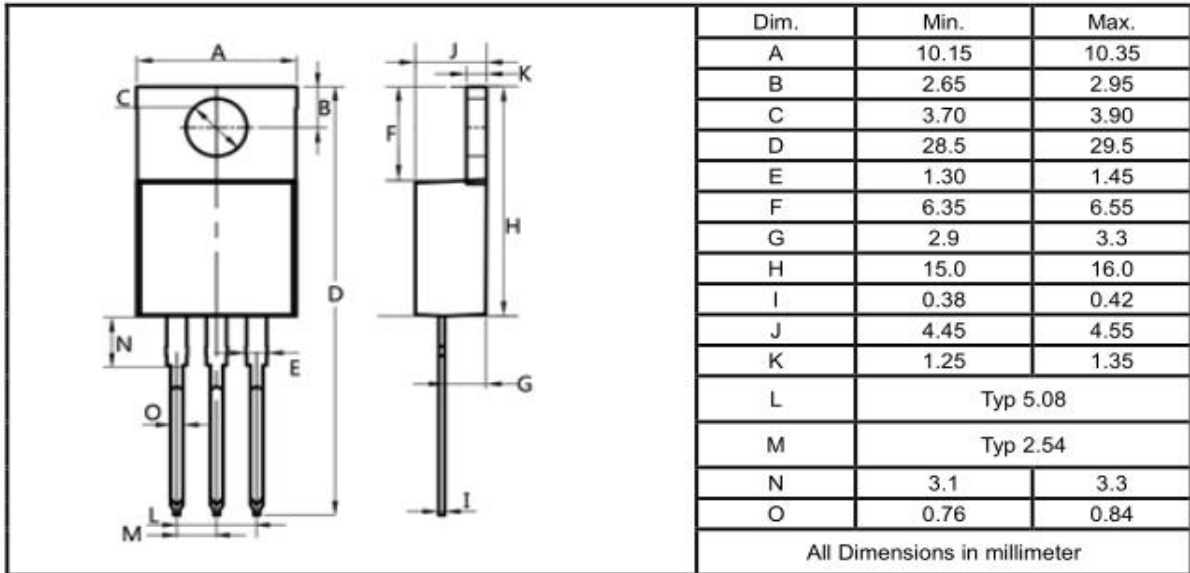
Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SBT10L100SCT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100SFCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100SDC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100SDC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton
SBT10L100SCS	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.

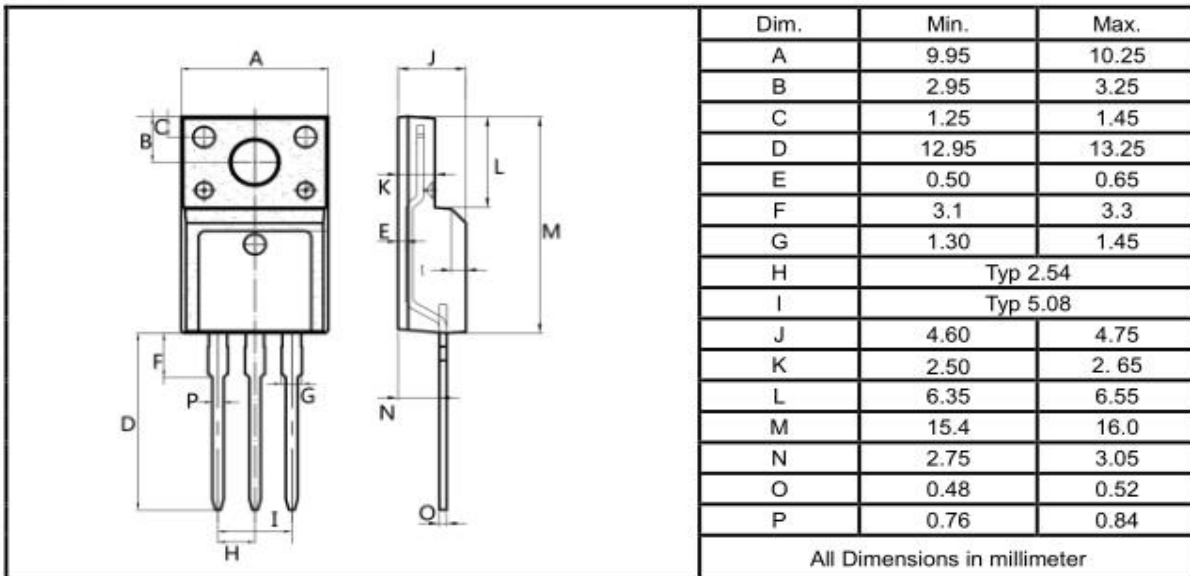
SBT10L100SCT/FCT/DC/CS

Package Outline Dimensions millimeters

TO-220AB

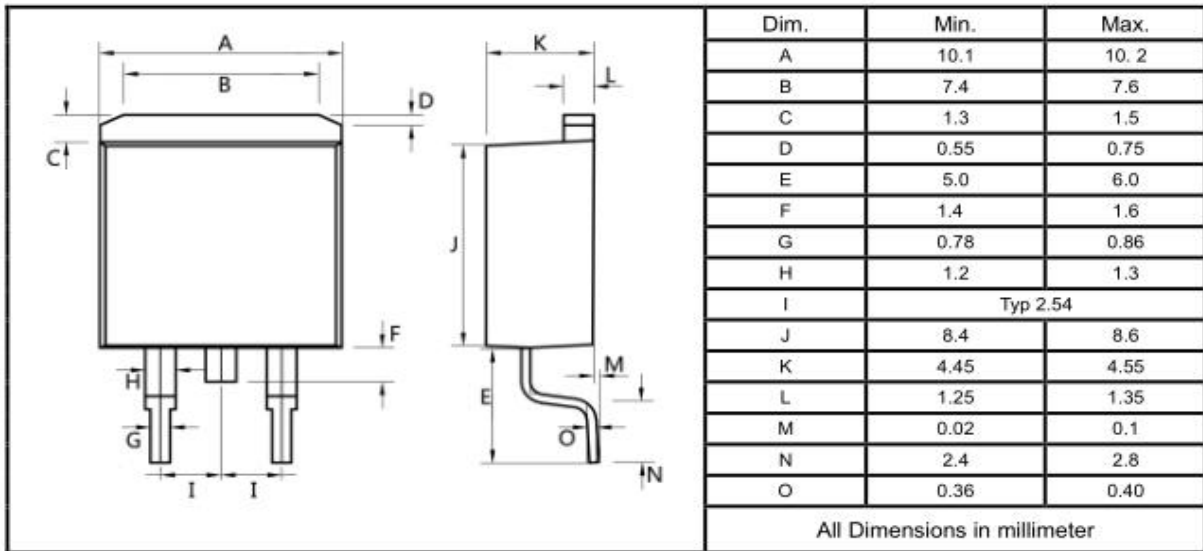


TO-220F



SBT10L100SCT/FCT/DC/CS

TO-263



TO-252

