

ULTRA LOW VF SCHOTTKY RECTIFIER
Reverse Voltage - 150 V
Forward Current - 40 A
FEATURES

- ♦Ultra 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

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

Primary Characteristic

I_o	40A
V_{RRM}	150V
I_{FSM}	300A
V_F	0.70V
T_J Max	150°C

Maximum Ratings at Ta=25°C unless otherwise specified

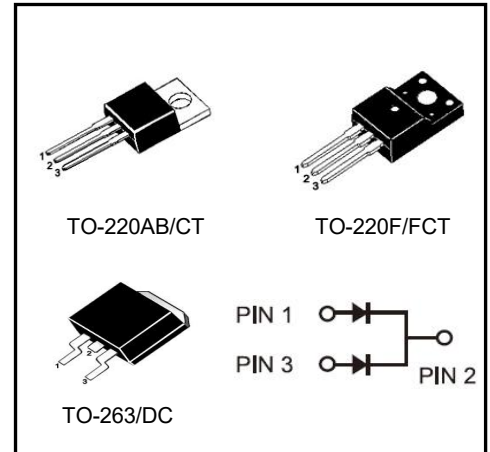
Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	150	V
Working Peak Reverse Voltage	V _{RWM}	105	V
Maximum DC Blocking Voltage	V _{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	20	A
	Total	40	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	300	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-220F	R _{θJC}	2/4	°C/W

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 =5A	0.57		-
		0.5	-		
at I _F =10A		0.73	-		
		0.6	-		
at I _F =20A		0.90	1.00		
		0.7	-		
Maximum Reverse Current at V _R =150V	I _R	5	20		μA
		5	-		mA

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



RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

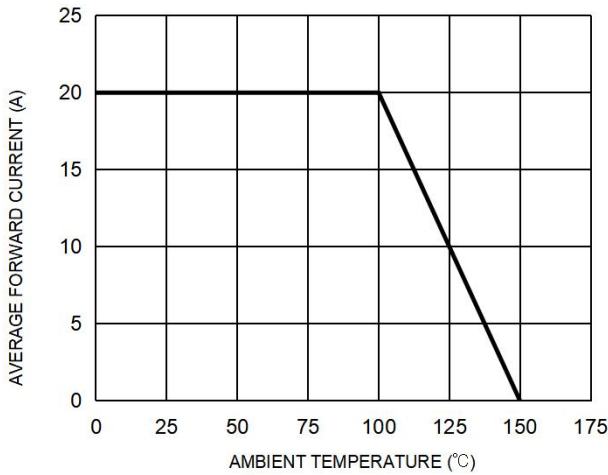


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

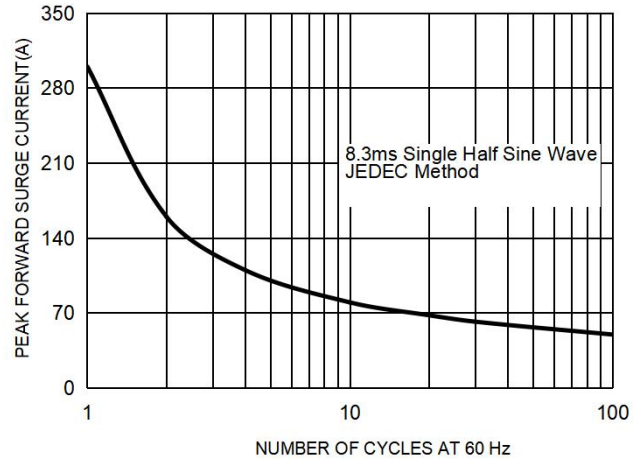


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

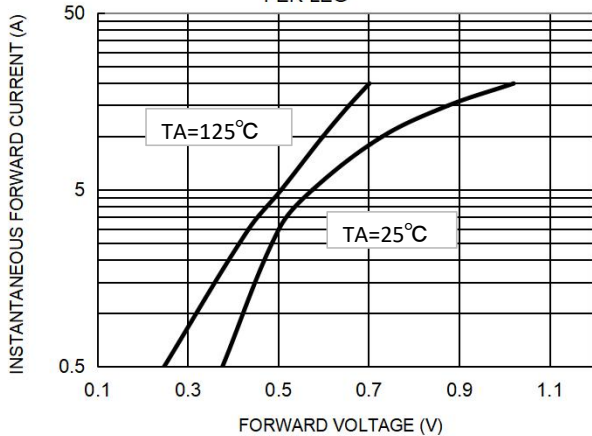
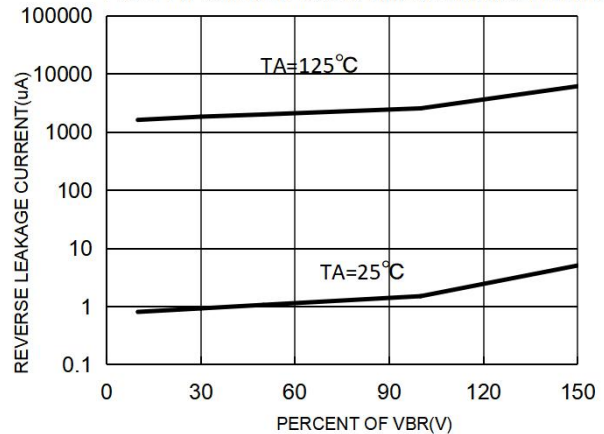
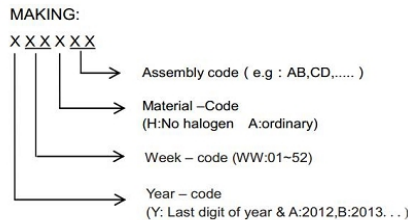
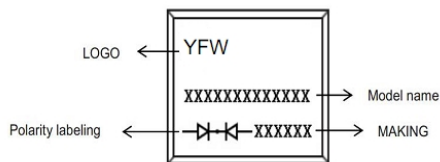


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



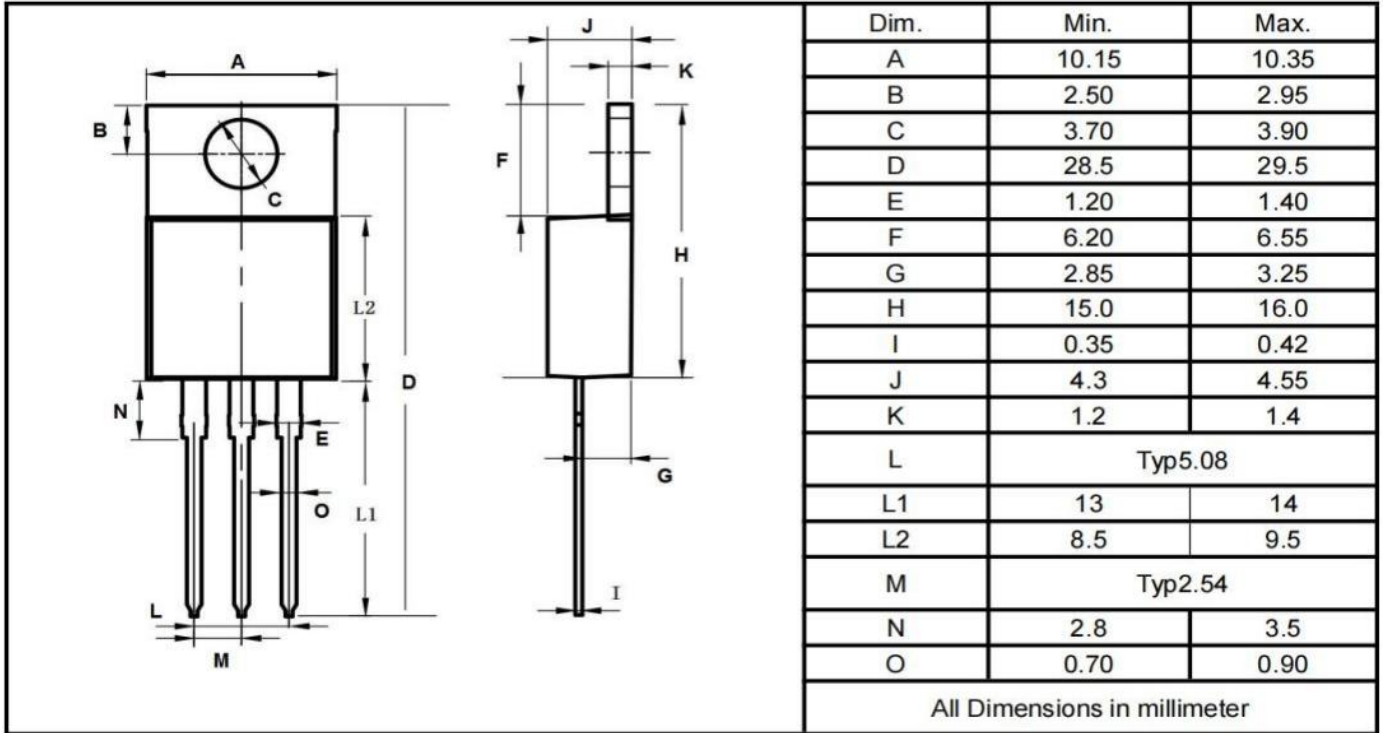
Ordering Information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SRT40U150CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SRT40U150FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SRT40U150DC	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton

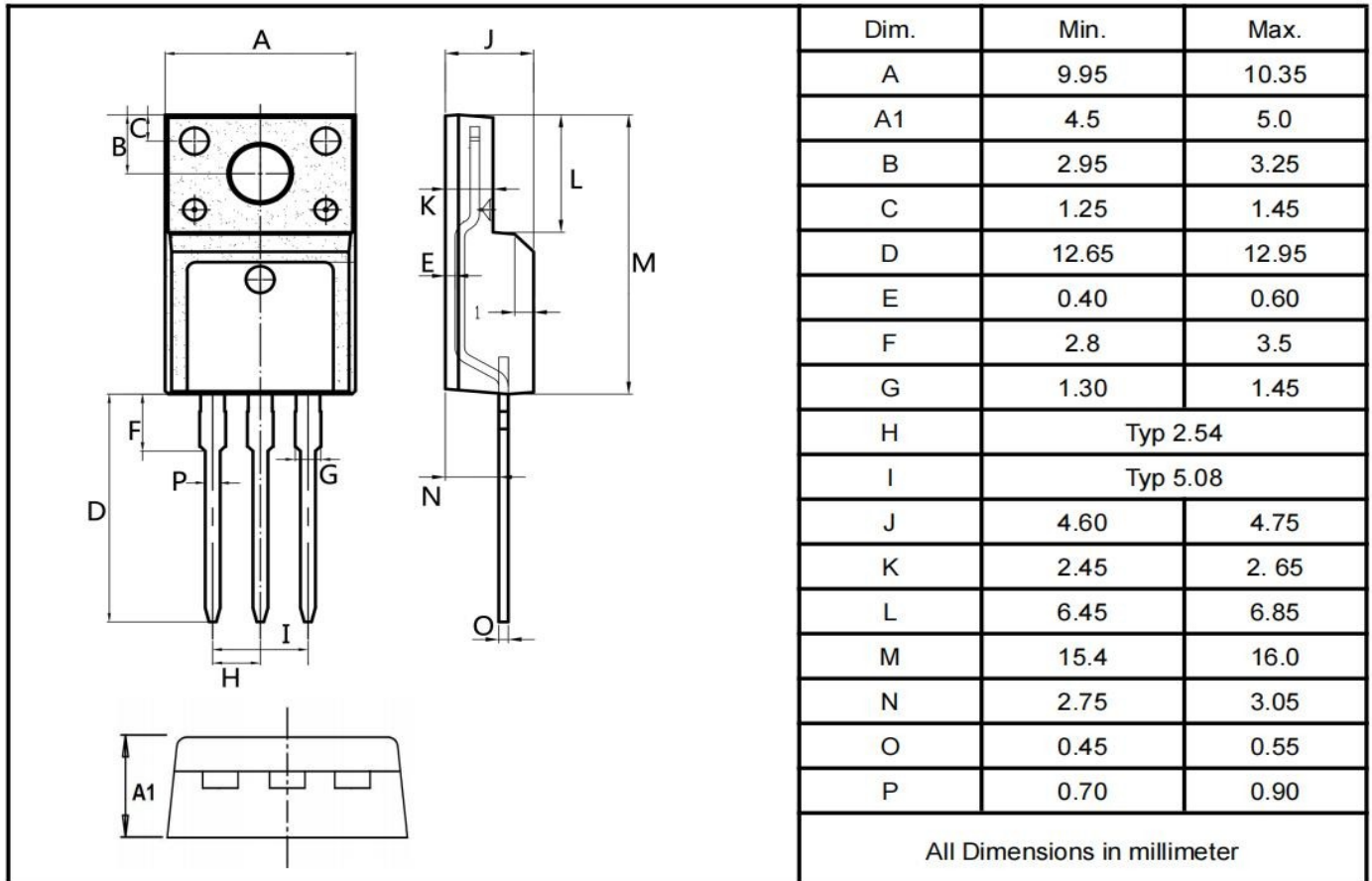
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AB



TO-220F



Package Outline Dimensions millimeters

TO-263

