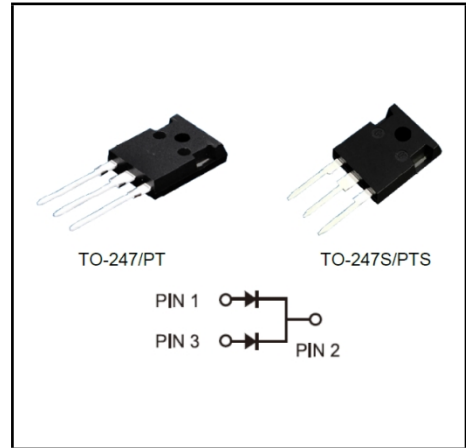


**SCHOTTKY BARRIER RECTIFIER**
**Reverse Voltage - 120 V**
**Forward Current - 30 A**

**FEATURES**

- ◆Low forward voltage
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses · High efficiency
- ◆Guarding for over voltage protection
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆Case: TO-247/PT TO-247/PTS
- ◆Solder bath temperature 275°C maximum, 10s per JESD22-106

**Primary Characteristic**

<b>I<sub>o</sub></b>	<b>2*15A</b>
<b>V<sub>RRM</sub></b>	<b>120V</b>
<b>I<sub>FSM</sub></b>	<b>220A</b>
<b>V<sub>F</sub></b>	<b>0.67V</b>
<b>T<sub>J</sub> Max</b>	<b>150°C</b>

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

Parameter		Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage		<b>V<sub>RRM</sub></b>	120	<b>V</b>
Maximum RMS voltage		<b>V<sub>RMS</sub></b>	120	<b>V</b>
Maximum DC Blocking Voltage		<b>V<sub>DC</sub></b>	120	<b>V</b>
Maximum Average Forward Rectified Current	Per Leg	<b>I<sub>o</sub></b>	15	<b>A</b>
	Total		30	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave		<b>I<sub>FSM</sub></b>	220	<b>A</b>
Operating Temperature Range		<b>T<sub>J</sub></b>	-50 ~ +150	<b>°C</b>
Storage Temperature Range		<b>T<sub>STG</sub></b>	-50 ~ +150	<b>°C</b>
Typical Thermal Resistance (Note1)		<b>R<sub>θJA</sub>/ R<sub>θJC</sub></b>	2	<b>°C/W</b>

**Note1: Thermal resistance from Junction to case per leg mounted on heatsink.**
**Electrical Characteristics (Per Leg) unless otherwise specified**

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		<b>V<sub>F</sub></b>	<b>Typ</b>	<b>Max</b>	<b>V</b>
at I <sub>F</sub> =5A	TA=25°C		0.54	-	
	TA=125°C		0.50	-	
at I <sub>F</sub> =10A	TA=25°C		0.69	0.78	
	TA=125°C		0.61	-	
at I <sub>F</sub> =15A	TA=25°C		0.81	0.92	
	TA=125°C		0.67	-	
Maximum Reverse Current at V <sub>R</sub> =120V	TA=25°C	<b>I<sub>R</sub></b>	30	50	<b>uA</b>
	TA=125°C		10	-	<b>mA</b>

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

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

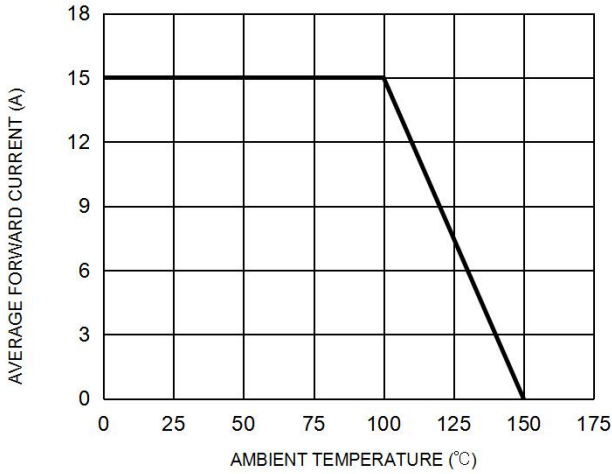


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

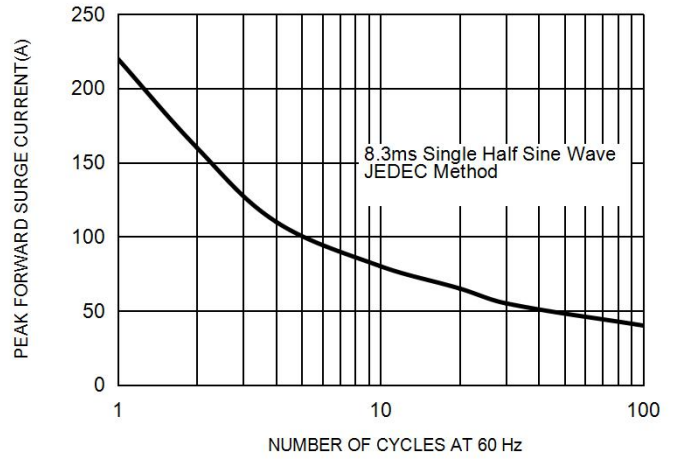


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

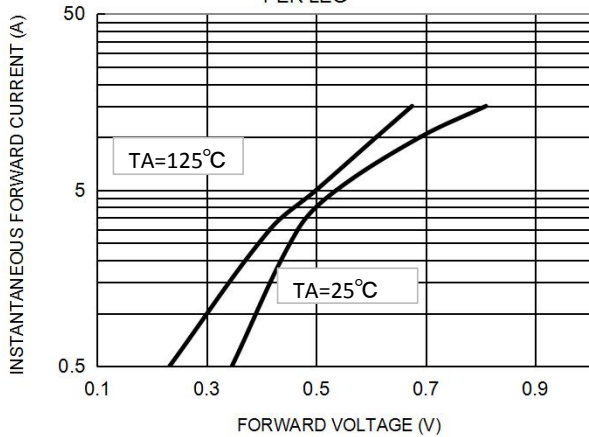
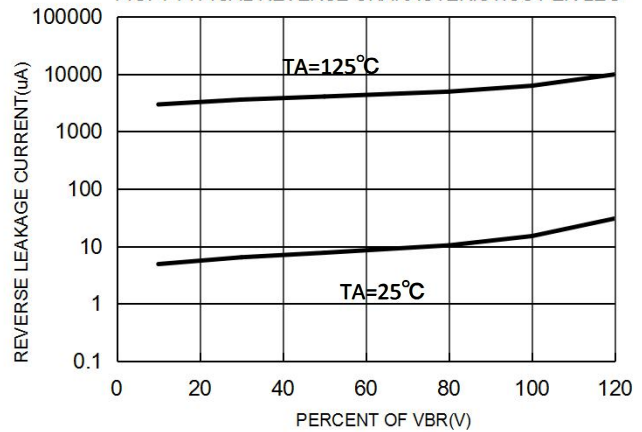
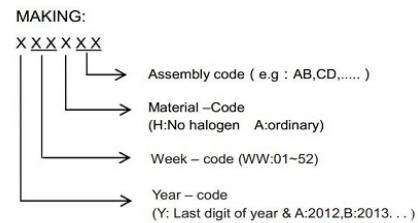


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



**Marking on the body**



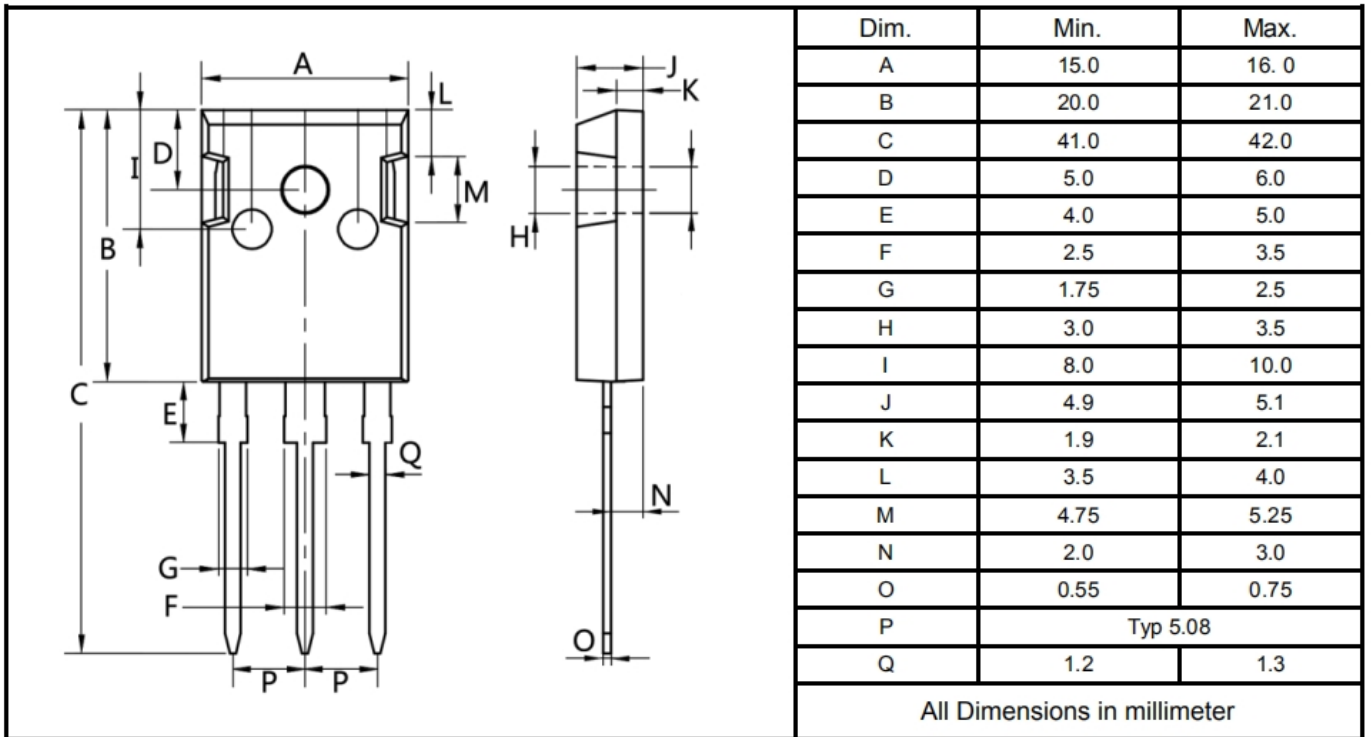
**Ordering information**

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SRT30L120PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 2400pcs/carton
SRT30L120PTS	TO-247S	0.158oz(4.48g)	30 pcs / tube	600pcs/box 2400pcs/carton

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

Package Outline Dimensions millimeters

**TO-247**



**TO-247S**

