



# SRF2030CT thru SRF20150CT

<b>SCHOTTKY BARRIER RECTIFIERS</b>	<b>REVERSE VOLTAGE - 30 to 100Volts</b> <b>FORWARD CURRENT - 20.0 Amperes</b>
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>●Metal of silicon rectifier , majority carrier conduction</li> <li>●Guard ring for transient protection</li> <li>●Low power loss,high efficiency</li> <li>●High current capability,low VF</li> <li>●High surge capacity</li> <li>●Plastic package has UL flammability classification 94V-0</li> <li>●For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>●Case: ITO-220AB molded plastic</li> <li>●Polarity: As marked on the body</li> <li>●Weight: 0.08ounces,2.24 grams</li> <li>●Mounting position :Any</li> </ul>	<p><b>ITO-220AB</b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave ,60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SRF 2030CT	SRF 2040CT	SRF 2050CT	SRF 2060CT	SRF 2080CT	SRF 20100CT	SRF 20150CT	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	40	50	60	80	100	150	V	
Maximum RMS Voltage	V <sub>RMS</sub>	21	28	35	42	56	70	105	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	40	50	60	80	100	150	V	
Maximum Average Forward Rectified Current ( See Fig.1) @T <sub>C</sub> =95 °C	I <sub>(AV)</sub>	20							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	250							A	
Peak Forward Voltage at 10.0A DC(Note1)	V <sub>F</sub>	0.55	0.70		0.85		0.95		V	
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Bolcking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	1.0				50				mA
Typical Junction Capacitance (Note2)	C <sub>J</sub>	600							pF	
Typical Thermal Resistance (Note3)	R <sub>θJC</sub>	2.0							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55to+125							°C	
Storage Temperature Range	T <sub>STG</sub>	-55to+150							°C	

NOTES:1.300us pulse width,2% duty cycle.  
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.  
 3.Thermal resistance junction to case.

**RATING AND CHARACTERISTIC CURVES**  
**SRF2030CT thru SRF20150CT**



FIG. 1 – FORWARD CURRENT DERATING CURVE

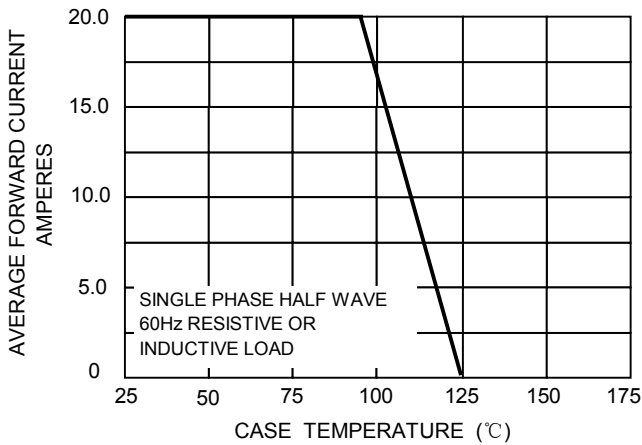


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

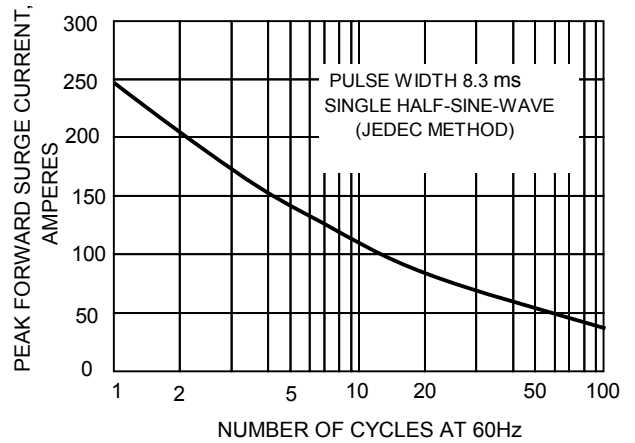


FIG.3-TYPICAL REVER CHARACTERISTICS

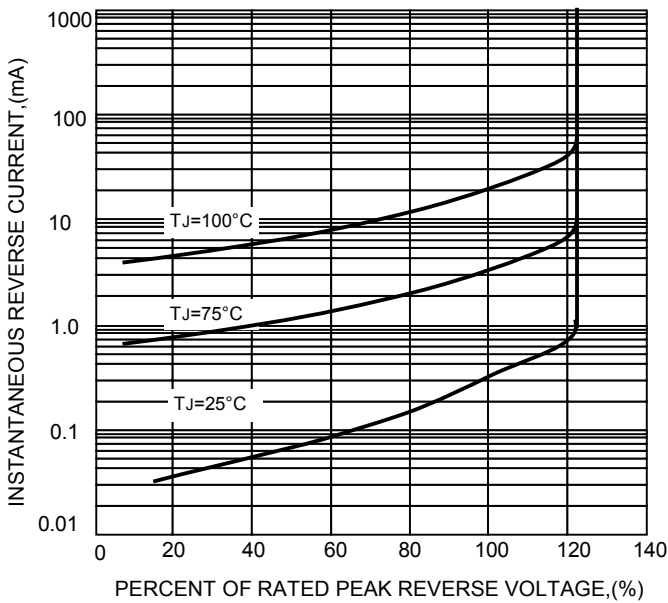


FIG.4-TYPICAL FORWARD CHARACTERISTICS

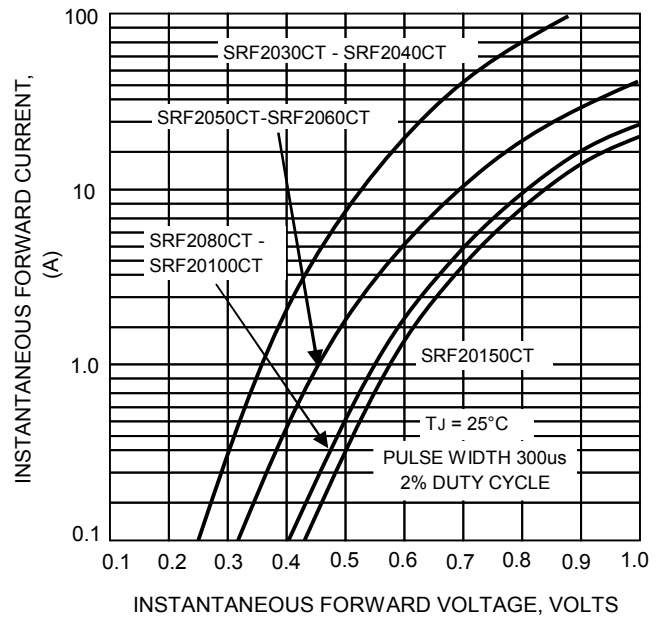


FIG.5 – TYPICAL JUNCTION CAPACITANCE

