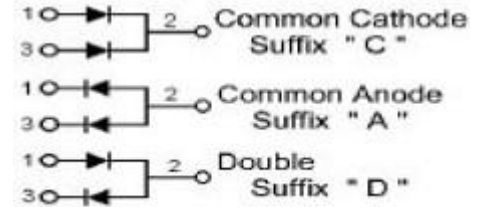




Schottky Barrier Rectifier

Features

- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High surge capacity
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length
- Also available with reversed polarity, add an "R" suffix, i.e.SRF1020R
- Also available in a non-isolated version, i.e.SR1020
- RoHS and REACH Compliance



Mechanical Data

Case:	Transfer molded plastic
Polarity:	As marked
Epoxy:	UL94V-0 rate flame retardant
Lead:	Solderable per MIL-STD-202E method 208C
Mounting position:	Any, 5 in-lbs Torque Max
Weight:	0.064 ounce, 1.81 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

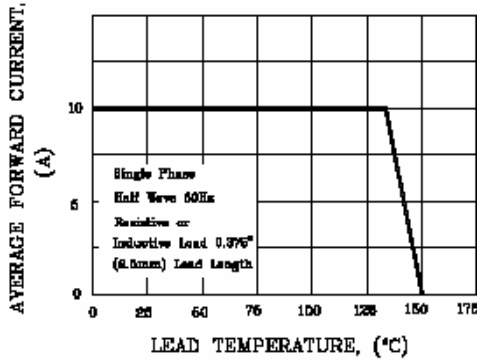
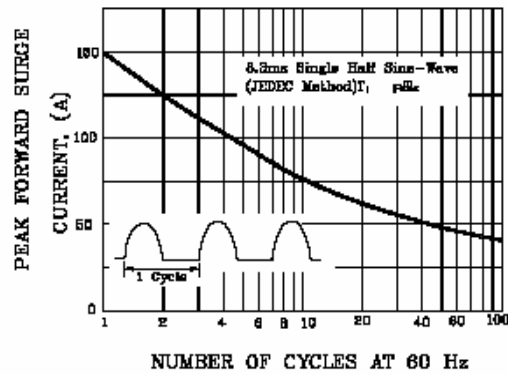
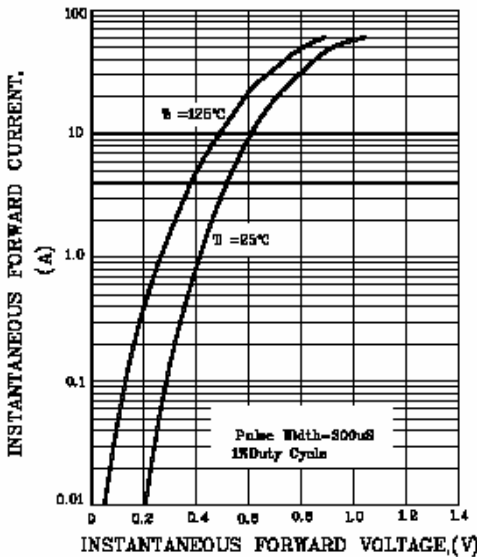
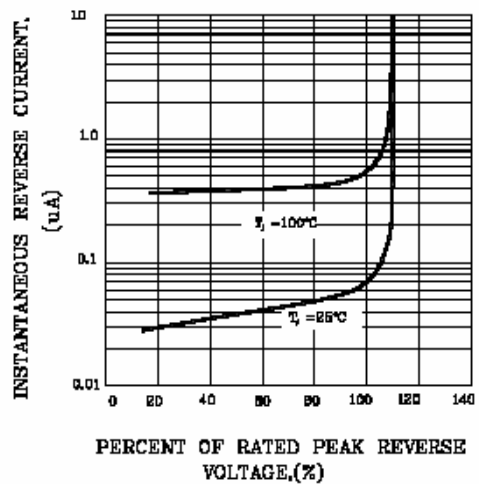
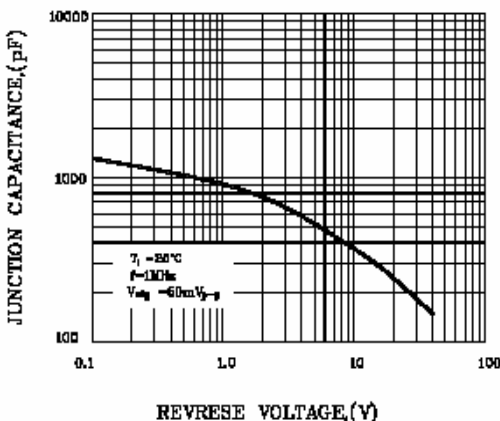
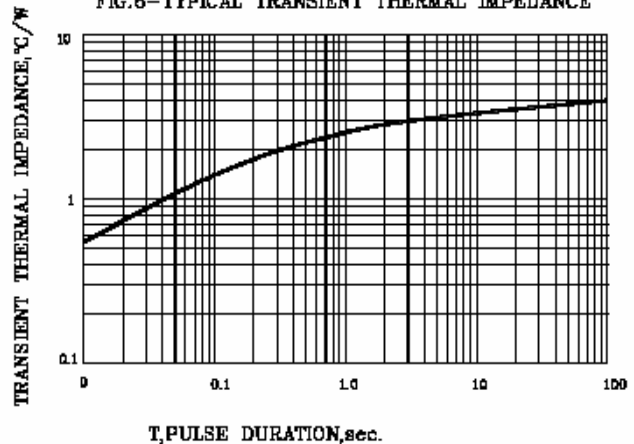
Symbol	Description	SRF 1020	SRF 1030	SRF 1035	SRF 1040	SRF 1045	SRF 1050	SRF 1060	SRF 1080	SRF 1100	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	20	30	35	40	45	50	60	80	100	V	
VRMS	Max RMS Voltage	14	21	25	38	32	35	42	56	70	V	
VDC	Max DC Blocking Voltage	20	30	35	40	45	50	60	80	100	V	
I(AV)	Max Average Forward Rectified Current	10.0									A	TL=135°C Note 1
IFSM	Peak Forward Surge Current	150									A	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150, -55 to +150									°C	

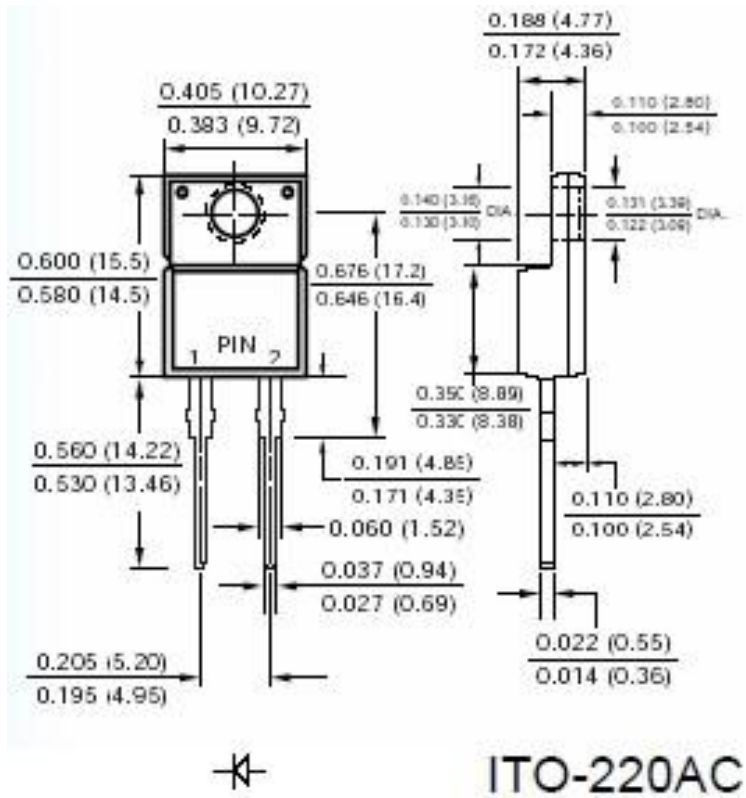
Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	SRF 1020	SRF 1030	SRF 1035	SRF 1040	SRF 1045	SRF 1050	SRF 1060	SRF 1080	SRF 1100	Unit	Conditions
VF	Max Instantaneous Forward Voltage	0.65			0.75			0.85			V	10.0A Note 1
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0									µA	TA=25°C
		50									mA	TA=100°C
TRR	Maximum reverse recovery time	100			150			200			nS	Note 1
Rθ-JC	Typical Thermal Resistance	3.0									°C/W	

Note:

1. Pulse test: 300µS pulse width, 1% duty cycle

SRF1020 ~ SRF1100
RATINGS AND CHARACTERISTIC CURVES SRF1020 THRU SRF1100
FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

FIG.4-TYPICAL REVERSE CHARACTERISTICS

FIG.5-TYPICAL JUNCTION CAPACITANCE

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE


SRF1020 ~ SRF1100
Dimensions in inches (mm)

Contact us:
US HEADQUARTERS
MEI SEMI INC.
2902 Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828