



SCHOTTKY BARRIER RECTIFIER

SRF1620C THRU SRF16100C

VOLTAGE RANGE
CURRENT

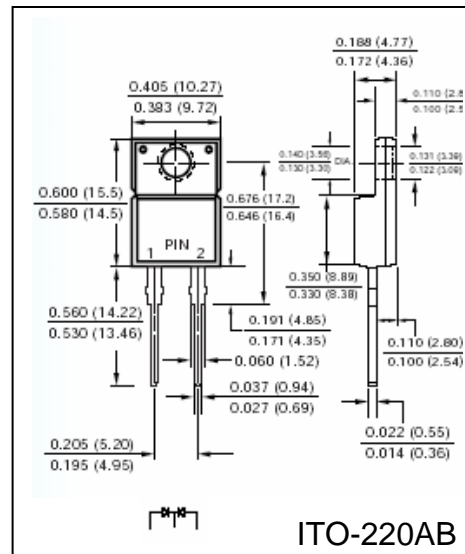
20 to 100 Volts
16.0 Ampere

FEATURES

- Dual Diode Device
- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High Surge capability
- High temperature Soldering guaranteed:
250 °C/10 seconds, 0.25" (6.35mm) lead length
- Also available with common Anode, add an "A" suffix,
i.e. SRF1620A, and as a doubler, add an "D" suffix,
i.e. SRF1620D
- Also available in a non isolate package, SR1620C
- Also available in single diode version, SRF1620

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-202E
Method 208C
- Polarity: as marked
- Mounting Position: Any, 5.0 in-lbs Torque Max
- Weight: 0.064 ounce, 1.81 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SRF 1620C	SRF 1630C	SRF 1635C	SRF 1640C	SRF 1645C	SRF 1650C	SRF 1660C	SRF 1680C	SRF 16100C	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	35	40	45	50	60	80	100	Volts
Maximum RMS Voltage	V_{RMS}	14	21	25	38	32	35	42	56	70	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	35	40	45	50	60	80	100	Volts
Maximum Average Forward Rectified Current, (Note 1) $T_L = 90^\circ\text{C}$ (SRF1620C-1645C), $T_L = 115^\circ\text{C}$ (SRF1650C-1680C)	$I_{(AV)}$	16.0									Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	150									Amps
Maximum Instantaneous Forward Voltage per leg @ 8.0A (Note 1)	V_F	0.65			0.75			0.85			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element (Note 1) $T_A = 25^\circ\text{C}$	I_R	5.0									mA
$T_A = 100^\circ\text{C}$		50									
Typical Thermal Resistance , per leg	$R_{\theta JC}$	3.0									°C/W
Operating Junction Temperature Range	T_J	(-55 to +150)									°C
Storage Temperature Range	T_{STG}	(-55 to +150)									°C

Notes:

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



RATINGS AND CHARACTERISTIC CURVES SRF1620C THRU SRF16100C

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

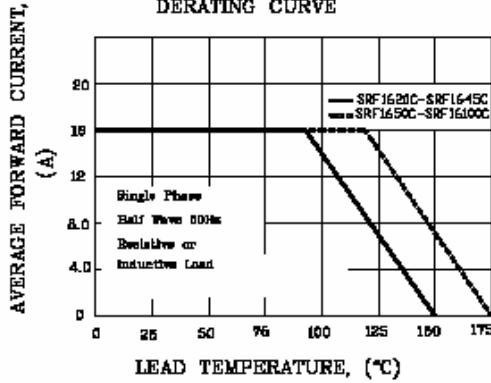


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

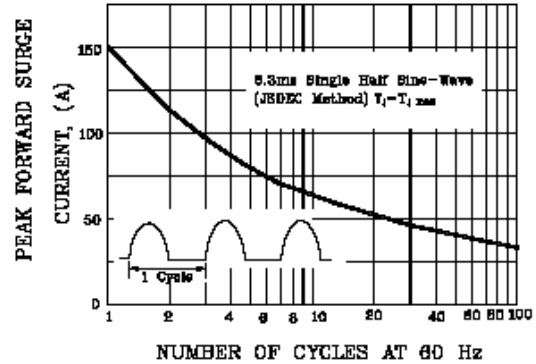


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

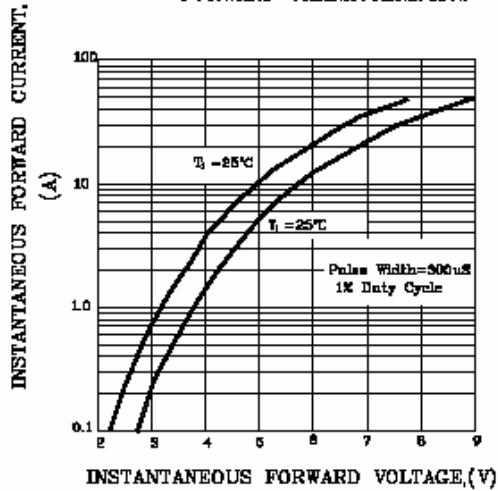


FIG.4-TYPICAL REVERSE CHARACTERISTICS

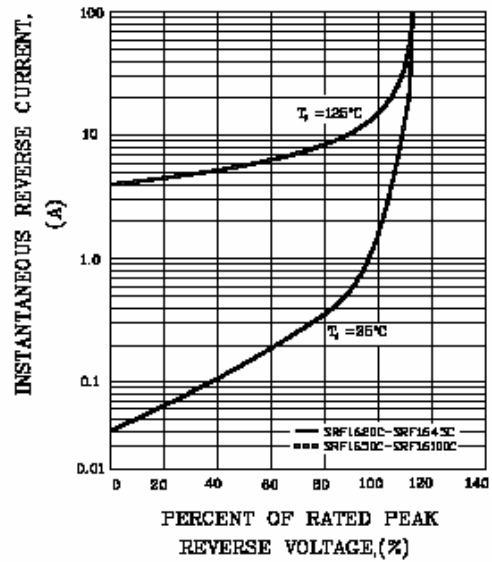
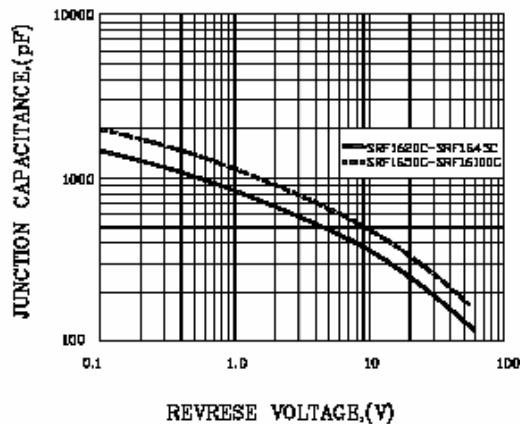


FIG.5-TYPICAL JUNCTION CAPACITANCE



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