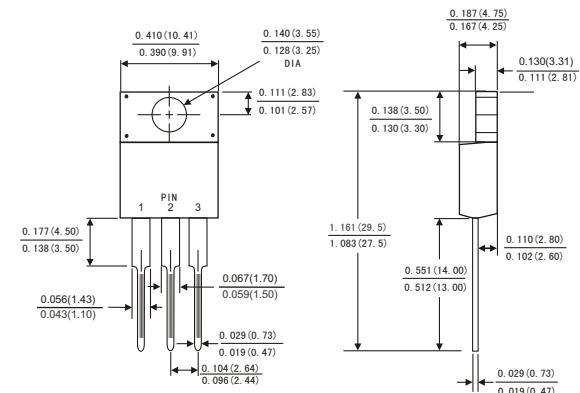


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SRF 3020CT	SRF 3030CT	SRF 3040CT	SRF 3045CT	SRF 3060CT	SRF 3080CT	SRF 30100CT	SRF 30150CT	SRF 30200CT	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	45	60	80	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	32	42	56	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	45	60	80	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	I _(AV) Per leg Total device						15.0 30.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}						250.0				Amps
Maximum instantaneous forward voltage at 30.0 A	V _F		0.60			0.75		0.85		0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R T _c =25°C T _c =125°C					0.2					mA
			30				50				
Typical thermal resistance (Note 2)	R _{θJC}					3.0					°C/W
Operating junction temperature range	T _J					-65 to +150					°C
Storage temperature range	T _{STG}					-65 to +150					°C

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

2.Thermal resistance from junction to case

SRF3020CT THRU SRF30200CT

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

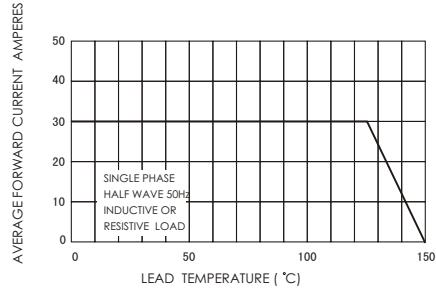


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

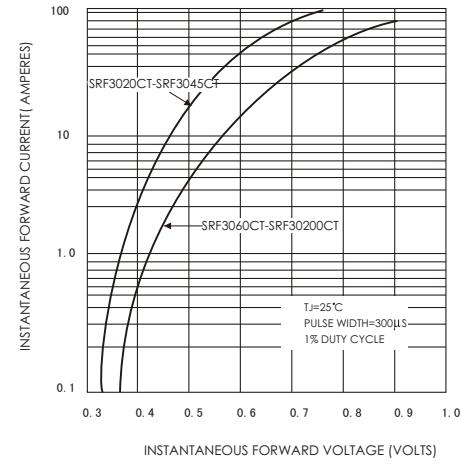


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

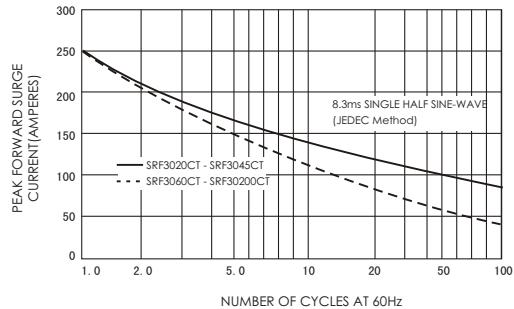


FIG.4-TYPICAL REVERSE CHARACTERISTICS

