SAMYANG ELECTRONICS

SRF2020CT --- SRF20200CT

SCHOTTKY BARRIER RECTIFIER

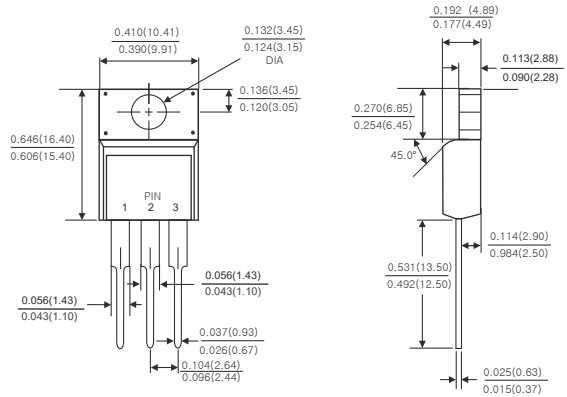
Reverse Voltage - 20 to 200 Volts
Forward Current - 20Amperes

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
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed:260°C/10 seconds,, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2015/863/EU



ITO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Mounting Torque: 10 in-lbs maximum

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%.)

Parameter		Symbols	SRF 2020CT	SRF 2030CT	SRF 2040CT	SRF 2045CT	SRF 2060CT	SRF 20100CT	SRF 20150CT	SRF 20200CT	Units
Maximum repetitive peak reverse voltage		V_{RRM}	20	30	40	45	60	100	150	200	Volts
Maximum RMS voltage		V_{RMS}	14	21	28	32	42	70	105	140	Volts
Maximum DC blocking voltage		V_{DC}	20	30	40	45	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	Per leg	$I_{(AV)}$	10.0								Amps
	Total device		20.0								
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	200.0								Amps
Maximum instantaneous forward voltage per diode @IF=10A		V_F	0. 60				0.75	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_A=25°C	I_R	100					20			μA
	T_A=100°C		5					–			mA
	T_A=125°C		–					3			
Typical thermal resistance (Note 2)		$R_{\theta JC}$	4. 5								°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: 300μ s pulse width,1% duty cycle
2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SRF2020CT THRU SRF20200CT

FIG.1-FORWARD CURRENT DERATING CURVE

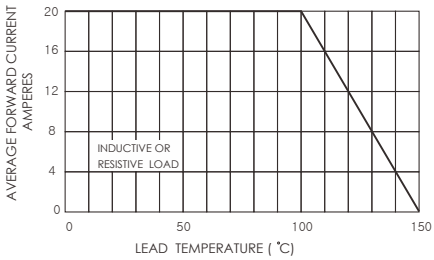


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

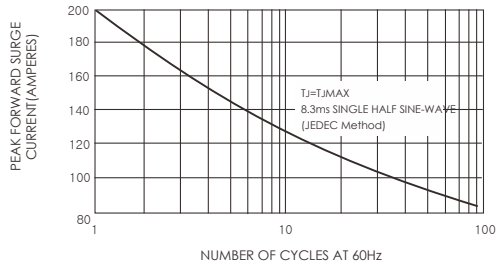


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

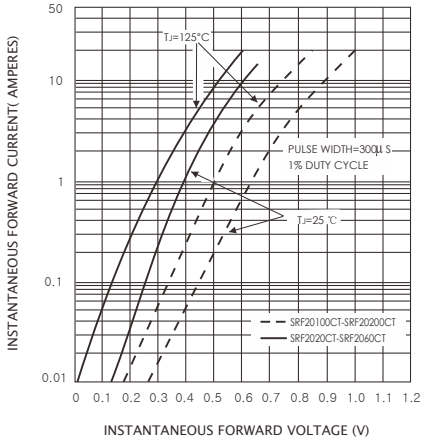


FIG.4-TYPICAL REVERSE CHARACTERISTICS

