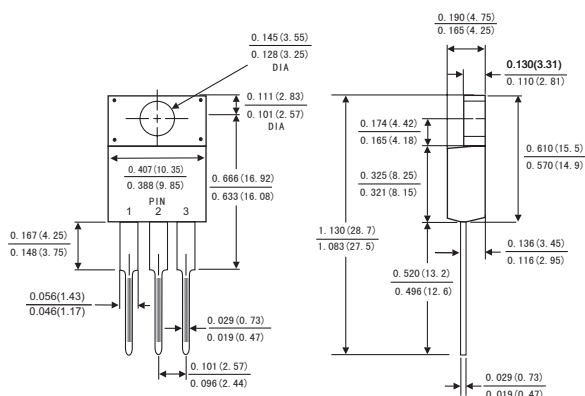


## FEATURES

- 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 2002/95/EC and WEEE 2002/96/EC



## ITO-220AB



## 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 grams

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 20100LCT	Units		
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>		100	Volts		
Maximum RMS voltage	V <sub>RMS</sub>		70	Volts		
Maximum DC blocking voltage	V <sub>DC</sub>		100	Volts		
Maximum average forward rectified current(see Fig.1)	Per leg	I <sub>(AV)</sub>	10.0	Amps		
	Total device		20.0			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>		150	Amps		
Typical thermal resistance per diode	R <sub>θJC</sub>		2.8	°C/W		
Voltage rate of change	dV/dt		10000	V/μs		
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>		-65 to +150	°C		
PARAMETER	TEST CONDITIONS		SYMBOLS	TYP.	MAX.	UNITS
Instantaneous forward voltage per diode	I <sub>F</sub> = 5A	T <sub>A</sub> = 25 °C	V <sub>F</sub> (NOTE 1)	0.55	-	Volts
		T <sub>A</sub> = 125 °C		0.77	0.79	
	I <sub>F</sub> = 10A	T <sub>A</sub> = 25 °C		0.50	-	
		T <sub>A</sub> = 125 °C		0.58	0.68	
Reverse current per diode	V <sub>R</sub> = 70V	T <sub>A</sub> = 25 °C	I <sub>R</sub> (NOTE 2)	17	-	μA
		T <sub>A</sub> = 125 °C		5.3	-	mA
	V <sub>R</sub> = 100V	T <sub>A</sub> = 25 °C		-	500	μA
		T <sub>A</sub> = 125 °C		12	25	mA

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

2. Pulse test: Pulse width ≤ 40ms

# RATINGS AND CHARACTERISTIC CURVES SRF20100LCT

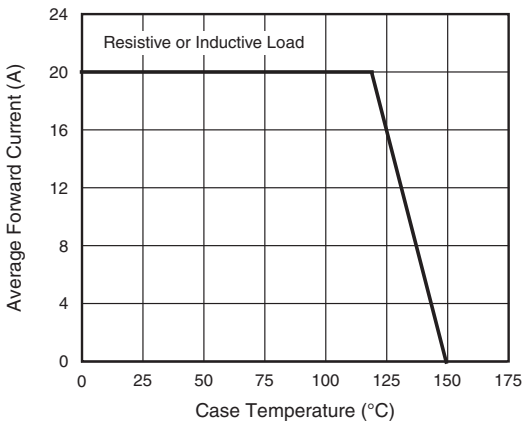


Fig. 1 - Maximum Forward Current Derating Curve

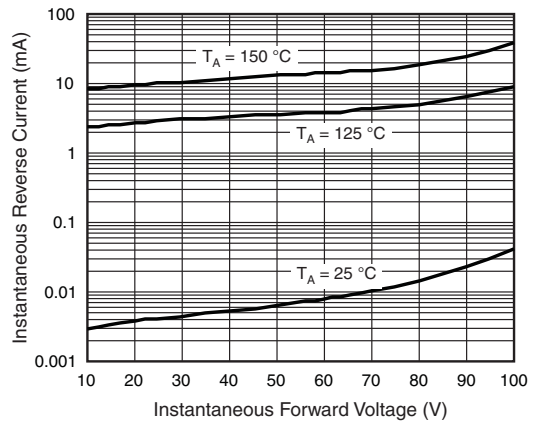


Fig. 4 - Typical Reverse Characteristics Per Diode

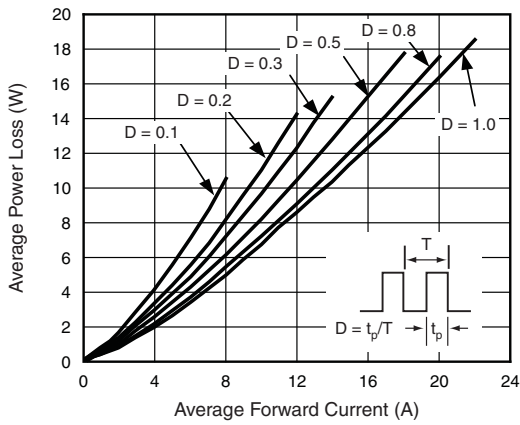


Fig. 2 - Forward Power Loss Characteristics Per Diode

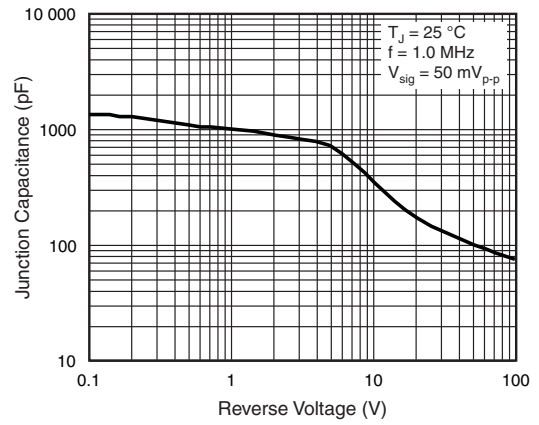


Fig. 5 - Typical Junction Capacitance Per Diode

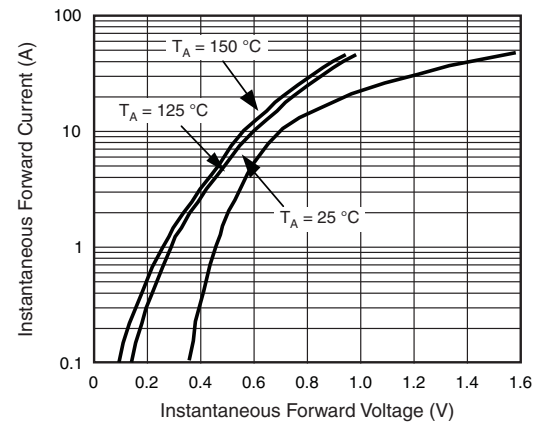


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

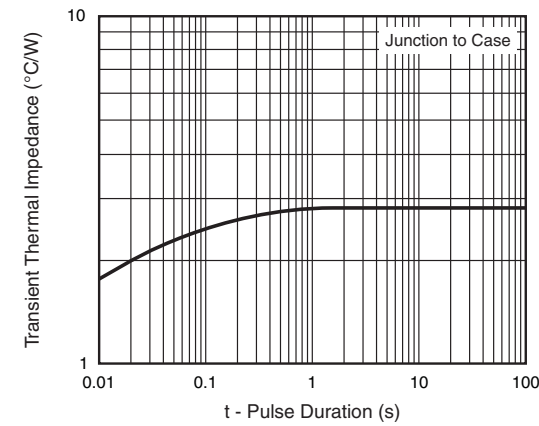


Fig. 6 - Typical Transient Thermal Impedance Per Diode