

# SRF4045CT THRU SRF40200CT

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 45 to 200 Volts

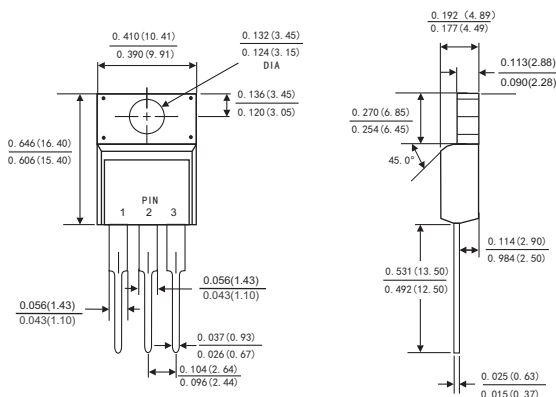
Forward Current - 40.0 Amperes

### 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 2011/65/EU



### 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

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%.)

Parameters	Symbols	SRF4045CT	SRF4060CT	SRF40100CT	SRF40150CT	SRF40200CT	Units
Maximum repetitive peak reverse voltage	VRRM	45	60	100	150	200	Volts
Maximum RMS voltage	VRMS	32	42	70	105	140	Volts
Maximum DC blocking voltage	VDC	45	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	Per leg	20.0					Amps
	Total device	40.0					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300.0					Amps
Maximum instantaneous forward voltage at 20.0 A	VF	0.60	0.75	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25°C	100		20			μ A
	TA=100°C	5		-			mA
	TA=125°C	-		3			
Typical thermal resistance (Note 2)	RθJC	4.5					°C/W
Operating junction temperature range	TJ	-55 to+150					°C
Storage temperature range	TSTG	-55 to+150					°C

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

2.Thermal resistance from junction to case

# RATINGS AND CHARACTERISTIC CURVES SRF4045CT THRU SRF40200CT

FIG.1-FORWARD CURRENT DERATING CURVE

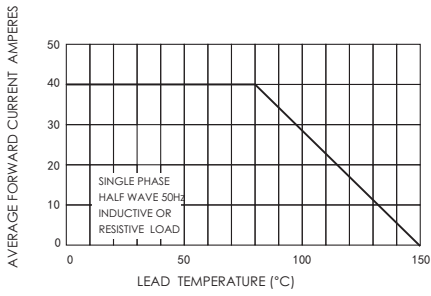


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

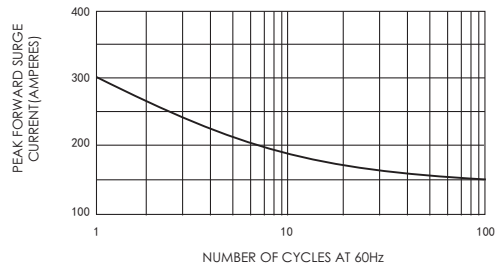


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

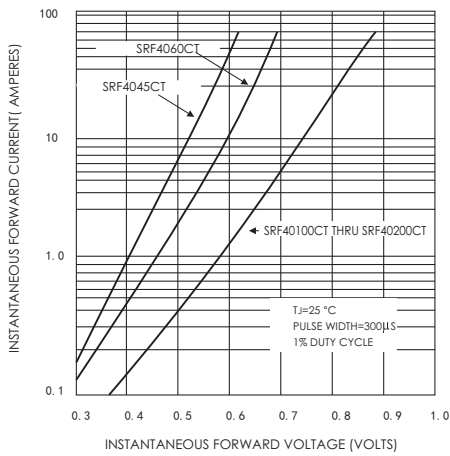


FIG.4-TYPICAL REVERSE CHARACTERISTICS

