DACO SEMICONDUCTOR CO., LTD.

SRF1020CT THRU SRF1060CT

SCHOTTKY BARRIER RECTIFIERS

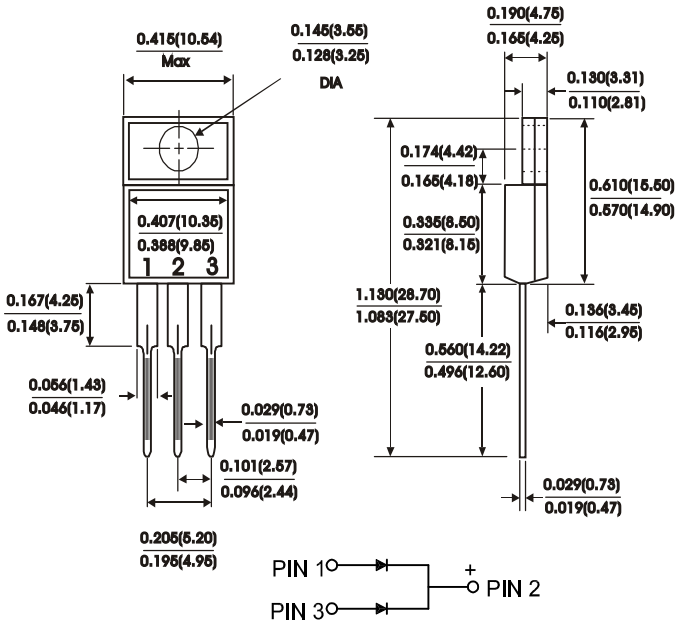
FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250℃/10 seconds, 0.25"(6.35mm) from case

MECHANICAL DATA

Case : JEDEC ITO-220AB molded plastic
Teminals : Leads solderable per MIL-STD-750 Method 2026
Polarity : As marked
Mounting Posttion : Any
Mounting Torque 5 in - lbs.max
Weight : 0.08 ounce, 2.24 grams

ITO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 ℃ ambient temperature unless otherwise specified.
Single phase half wave, 60 Hz resistive or inductive load.
For capacitive load. derate current by 20%.

Characteristic	Symbol	SRF 1020CT	SRF 1030CT	SRF 1035CT	SRF 1040CT	SRF 1045CT	SRF 1050CT	SRF 1060CT	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	35	40	45	50	60	Volts
Maximum RMS voltage	V_{RMS}	14	21	25	28	32	35	42	Volts
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	50	60	Volts
Maximum average forward rectified current at Tc = 125 ℃	$I_{(AV)}$	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Per leg)	I_{FSM}	120							Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) IF = 5.0A	V_F	0.65					0.75		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) Tc = 25 ℃ / Tc = 125 ℃	I_R	0.5 / 50.0							mA
Typical thermal resistance (Per leg)(NOTE 1)	R_{th}-JC	5.0							℃/W
Operating temperature range	T_J	-65to+150							℃
Storage temperature range	T_{Stg}	-65to+175							℃

NOTES:
(1)Thermal resistance from junction to case
(2)Pulse test : 300 us pulse width, 1% duty cycle
(3)Marking : SRF1020CT (Symbol) = SRF1020 (Marking) (Whitout Marking "CT")

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

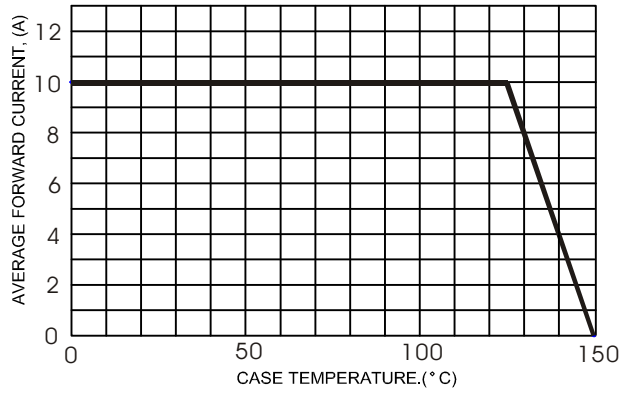


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

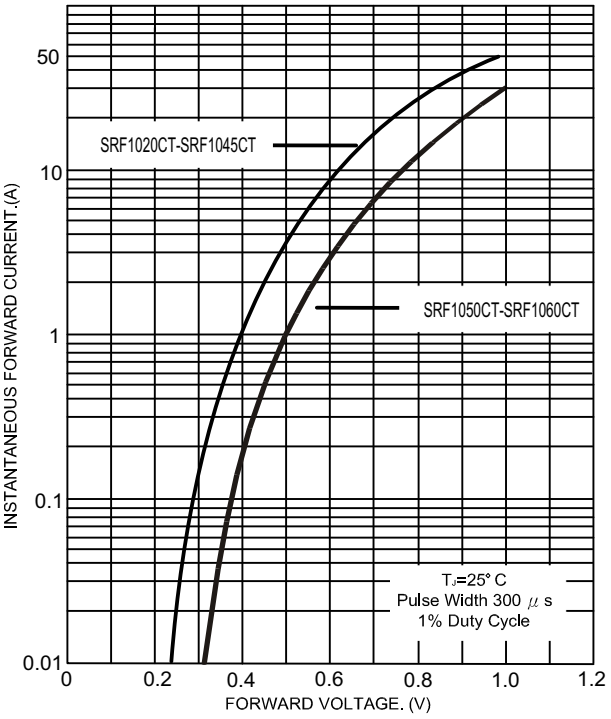


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

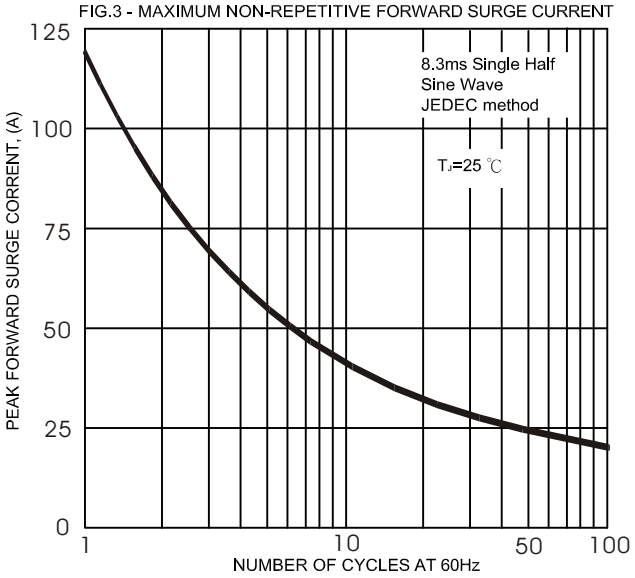


FIG.4- TYPICAL JUNCTION CAPACITANCE

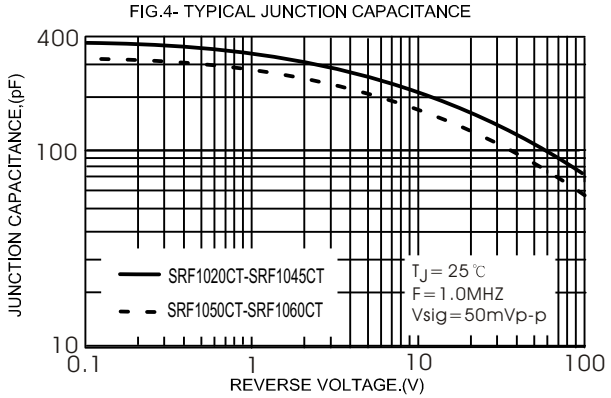
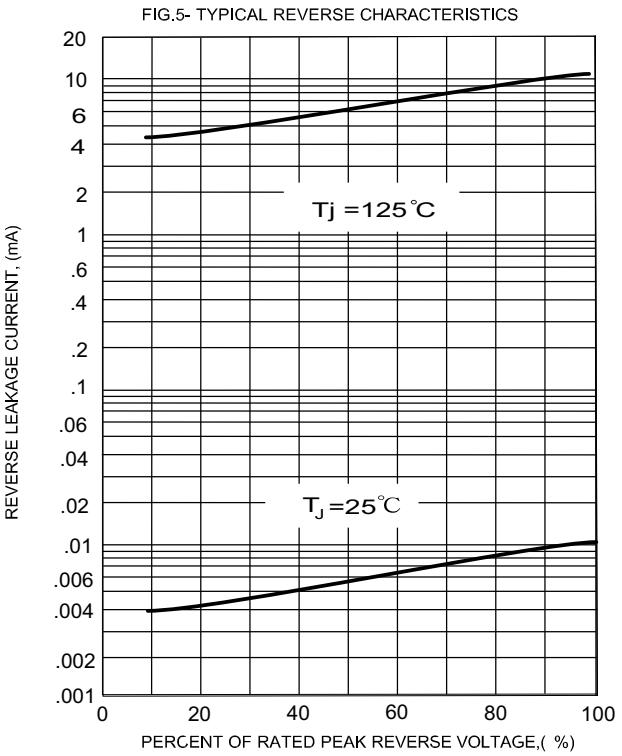


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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