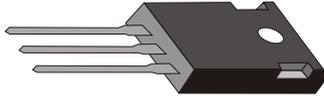


SFP304CT THRU SFP307CT



30.0 AMP SUPER FAST RECTIFIERS



FEATURES

- * Glass passivated chip junctions
- * High Speed recovery time for switching mode application
- * High Forward Surge Capability
- * Low Reverse Current
- * Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- * Leads: Solderable per mil-std-202, Method 208
- * Polarity: as marked
- * Mounting torque: 5 in-lbs maximum
- * Terminals: Puretin plated

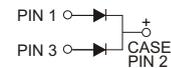
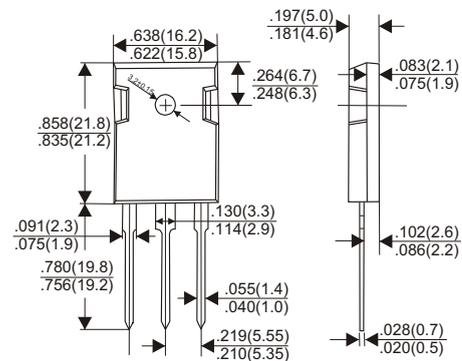
VOLTAGE RANGE

200 to 600 Volts

CURRENT

30.0 Amperes

TO-247



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SFP304CT	SFP306CT	SFP307CT	UNITS
Maximum Recurrent Peak Reverse Voltage	200	400	600	V
Maximum RMS Voltage	140	280	420	V
Maximum DC Blocking Voltage	200	400	600	V
Maximum Average Forward Rectified Current at Tc=100°C per device		30.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		400		A
Maximum Instantaneous Forward Voltage at 15.0A	1.05	1.35	1.85	V
Maximum DC Reverse Current TA=25°C		5		μA
at Rated DC Blocking Voltage TA=125°C		250		μA
Maximum Reverse Recovery Time (Note 1)		35		nS
Typical Thermal Resistance RθJC (Note 2)		1.5		°C/W
Operating and Storage Temperature Range Tj, Tstg		-55 — +150		°C

NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Thermal resistance from junction to case.

RATING AND CHARACTERISTIC CURVES (SFP304CT THRU SFP307CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

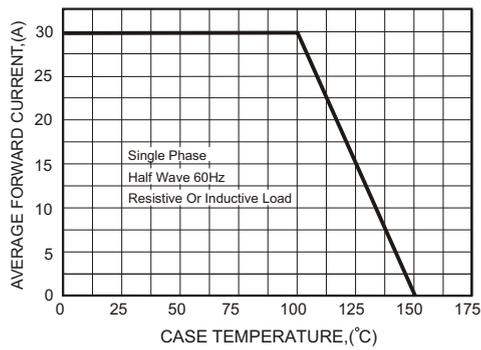


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

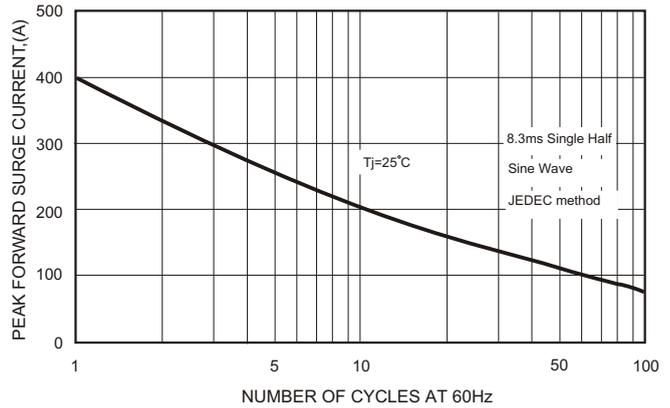


FIG.3-TYPICAL FORWARD CHARACTERISTICS

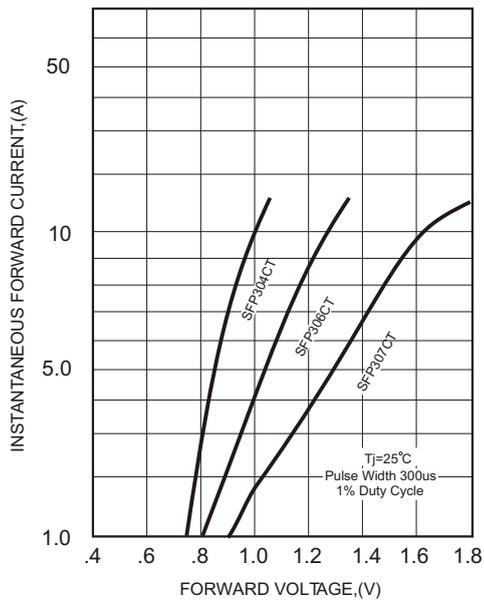


FIG.4-TYPICAL REVERSE CHARACTERISTICS

