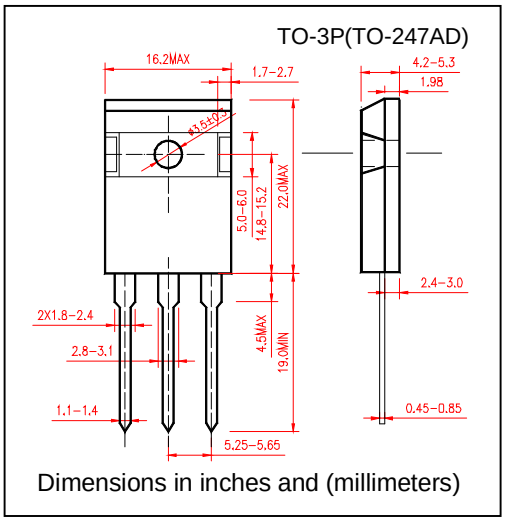
SUPER FAST GLASS PASSIVATED RECTIFIER

SF301P THRU SF304P

VOLTAGE RANGE	**50 to 200 Volts**
CURRENT	**30.0 Ampere**

FEATURES

- Glass passivated chip junction
- Low power loss, high efficiency
- Low leakage
- Super fast switching speed
- High surge capacity
- High temperature soldering guaranteed
  250℃/10 second, 0.16″ (4.06mm) lead length
- Also available with common Anode, add an “A” suffix,
  i.e. SF301PA, add as a doubler, add a “D” suffix,
  i.e. SF301PD



MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-202E method 208C
- Polarity: as marked
- Mounting position: Any, 10 in-lbs Torque Max
- Weight: 0.22ounce, 6.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SF301P	SF302P	SF303P	SFF304P	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	35	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	Volts
Maximum Average Forward Rectified Current At Tc=100℃	$I_{(AV)}$	30				Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	250				Amps
Maximum Instantaneous Forward Voltage per at 15.0A	V_F	1.0				Volts
Maximum DC Reverse Current at rated DC Blocking Voltage at T_A = 25℃	I_R	10				μA
Maximum DC Reverse Current at rated DC Blocking Voltage at T_A = 125℃	I_R	500				μA
Maximum Reverse Recovery Time Test conditions I_F =0.5A, I_R =1.0A, I_{RR} =0.25A	t_{rr}	35				nS
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	60				pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.5				℃/W
Operating Junction Temperature	T_J	(-55 to +150)				℃
Storage Temperature Range	T_{STG}	(-55 to +150)				℃

Notes:
1. Unit mounted on heatsink

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	CURRENT	30.0 Ampere

RATING AND CHRACTERISTIC CURVES SF301P THRU SF304P

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

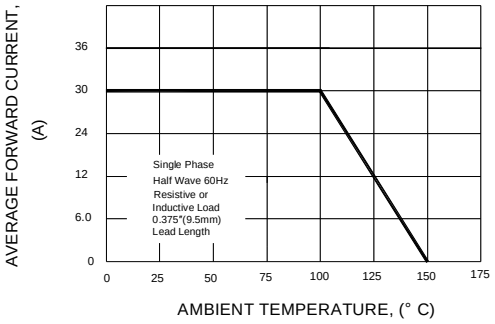


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

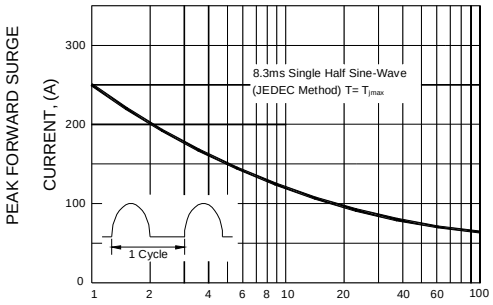


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

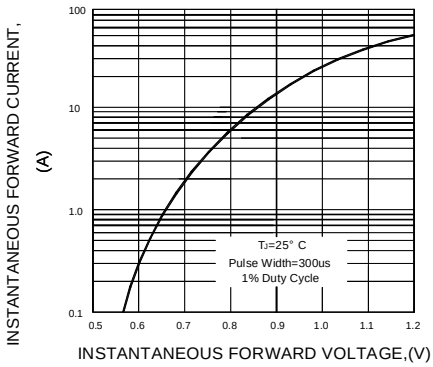


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG

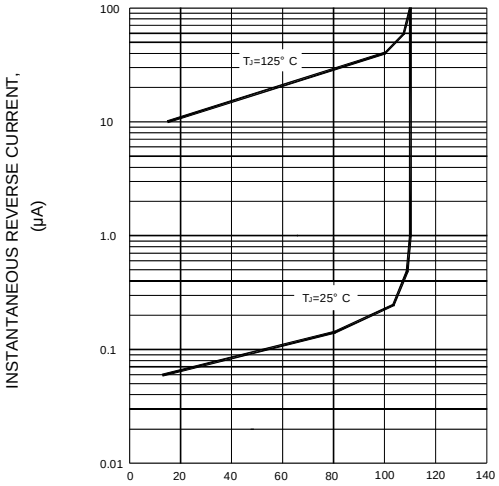


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

