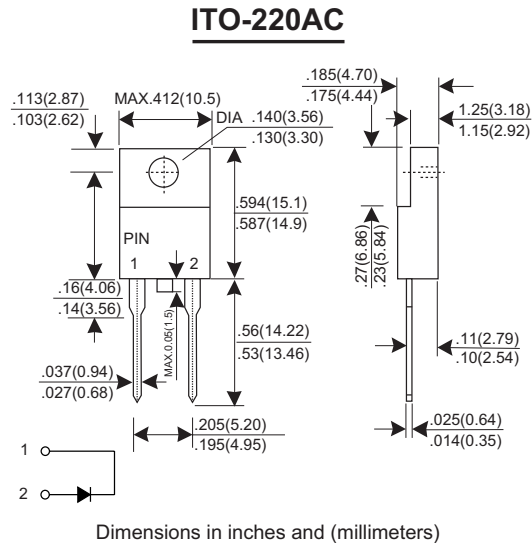


Glass Passivated Super Fast Recovery Rectifier
SF10A01F-G THRU SF10A06F-G
Voltage Range 50 to 600 V
Current 10.0 Ampere
Features

- ★ Fast switching for high efficiency
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Mechanical Data

- ★ Case: Molded plastic ITO-220AC
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208
- ★ Polarity: Color band denotes cathode
- ★ Mounting position: Any
- ★ Weight: 1.16 grams


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	SF 10A01F-G	SF 10A02F-G	SF 10A03F-G	SF 10A04F-G	SF 10A05F-G	SF 10A06F-G	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current T _c =100°C	I _{F(AV)}	10.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100						A
Maximum Instantaneous Forward Voltage @ 10.0 A	V _F	0.95			1.3		1.5	V
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	10.0			250			uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35			50			nS
Typical junction Capacitance (Note 2)	C _J	65						pF
Typical Thermal Resistance (Note 3)	R _{θJC}	2.2						°CW
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150						°C

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
 (3) Thermal Resistance junction to case.

Glass Passivated Super Fast Recovery Rectifier

COMCHIP
SMD DIODE SPECIALIST

RATINGS AND CHARACTERISTIC CURVES SF10A01F-G THRU SF10A06F-G

FIG.1 - FORWARD CURRENT DERATING CURVE

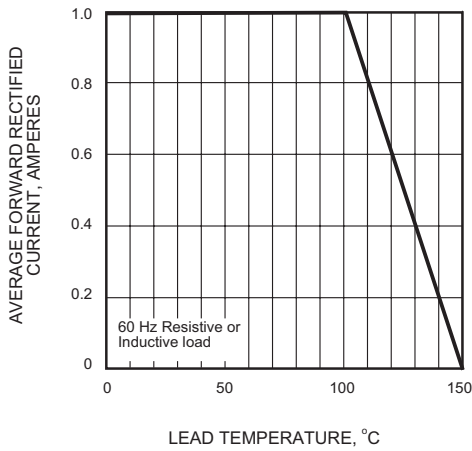


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

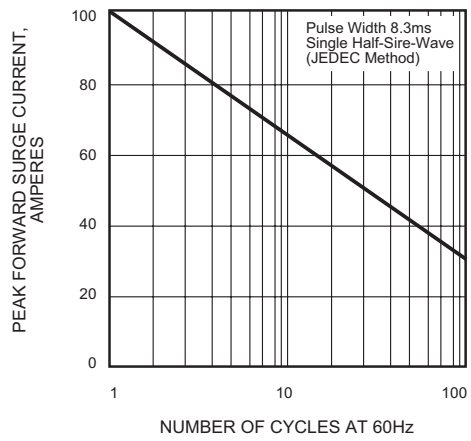


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

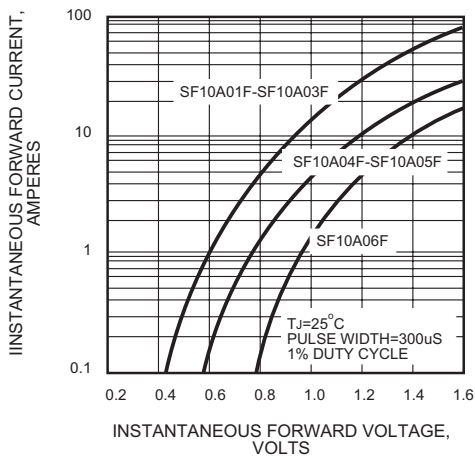


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

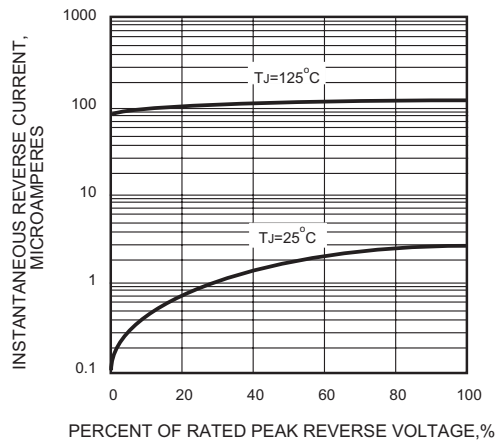


FIG.5 - TYPICAL JUNCTION CAPACITANCE

