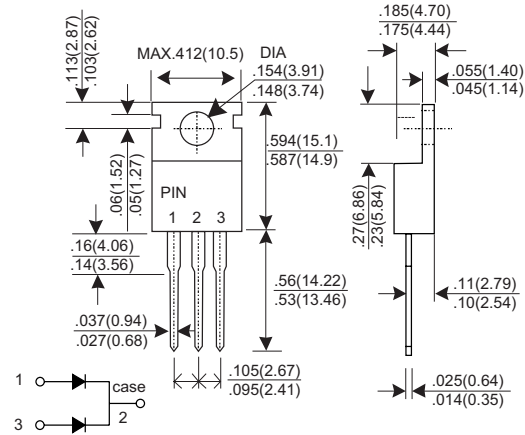


Glass Passivated Efficient Fast Recovery Rectifier
EF10C01C-G thru EF10C06C-G (RoHS Device)
Voltage Range 50 to 600 V
Current 10.0 Ampere
Features

- ★ 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 TO-220AB
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208 guaranteed
- ★ Mounting position: Any
- ★ Weight: 2.07 gram

TO-220AB


Dimensions in inches and (millimeters)

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%.

CHARACTERISTIC	SYMBOL	EF10C01C -G	EF10C02C -G	EF10C03C -G	EF10C05C -G	EF10C06C -G	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Rectified Current TL=100°C	IF(AV)	10.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	100					A
Maximum Instantaneous Forward Voltage @ 5.0 A	VF	0.95			1.25	1.85	V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10 250					uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	25					nS
Typical junction Capacitance (Note 2)	CJ	65					pF
Typical Thermal Resistance (Note 3)	RθJC	2.2					°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-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 lead.

“-G” suffix designates RoHS compliant Version

EF10C01C-G thru EF10C06C-G (RoHS Device)

RATINGS AND CHARACTERISTIC CURVES EF10C01C-G THRU EF10C06C-G

FIG.1 - FORWARD CURRENT DERATING CURVE

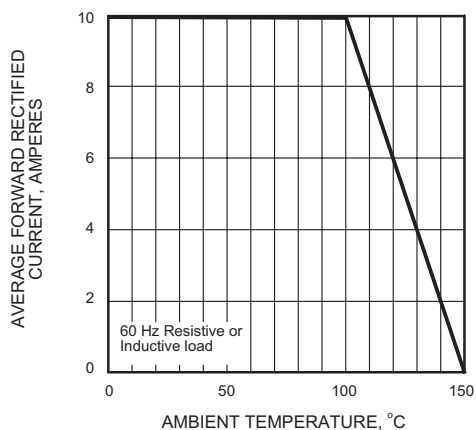


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

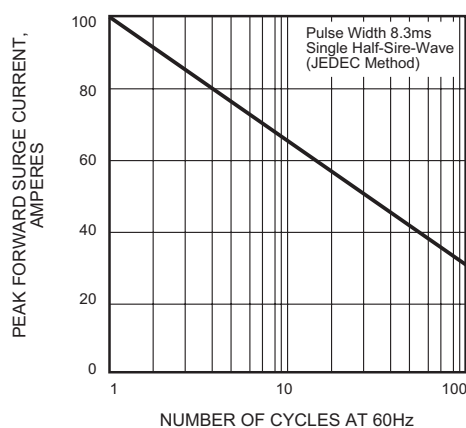


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

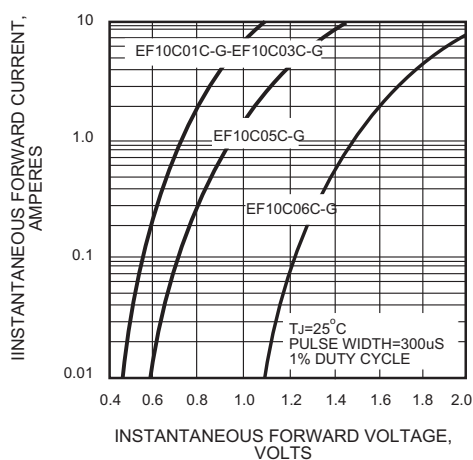


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

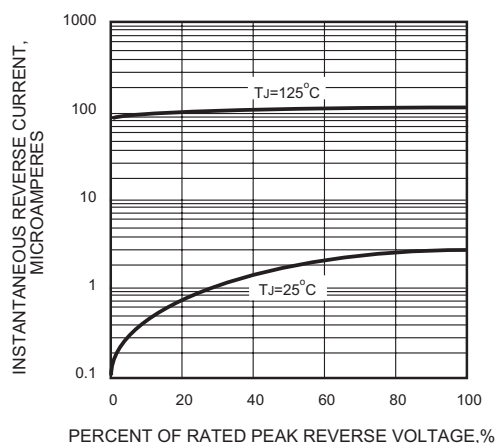


FIG.5 - TYPICAL JUNCTION CAPACITANCE

