

Voltage Range 100 to 600 V
Current 8.0 Ampere

Features

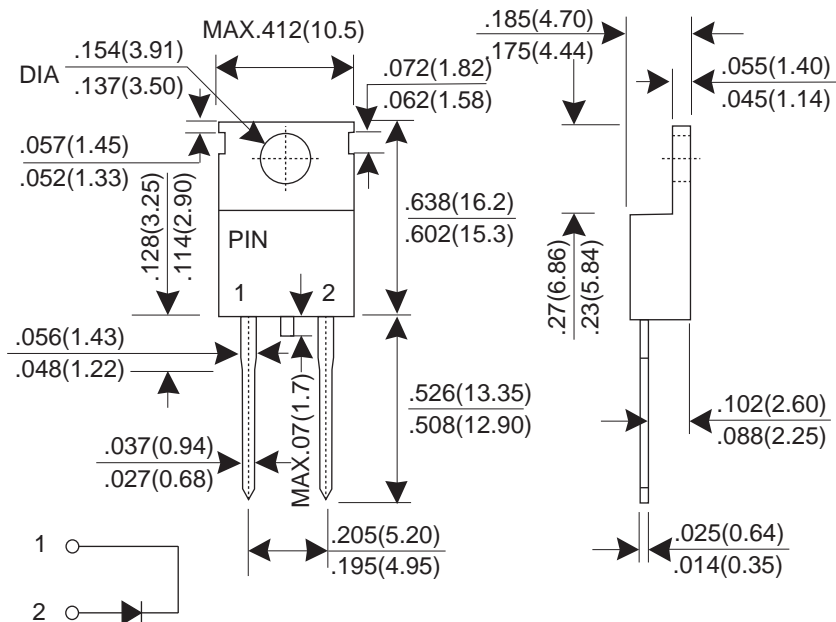
- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Mechanical Data

- * Case: Molded plastic TO-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: 2.07grams

Dimensions in inches and (millimeters)

TO-220AC



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%.

PARAMTER	SYMBOL	TEF8A02	TEF8A03	TEF8A05	TEF8A06	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	400	600	V
Maximum RMS Voltage	VRMS	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	8.0				A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	125				A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.95		1.25	2.4	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR		10.0			uA
			250			uA
Maximum Reverse Recovery Time (Note 1)	Trr	25				nS
Typical junction Capacitance (Note 2)	CJ	85			50	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 case.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

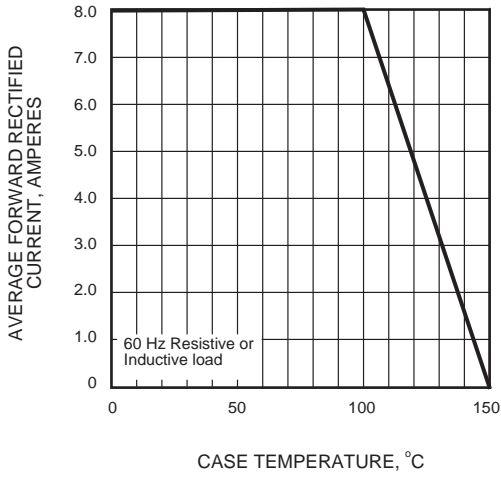


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

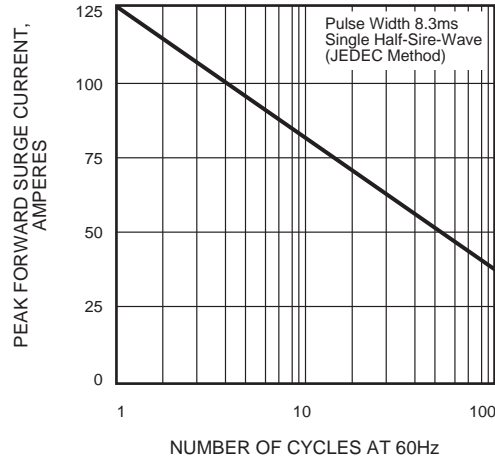


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

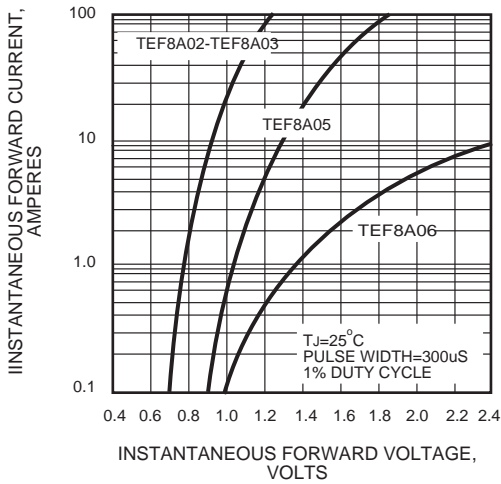


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

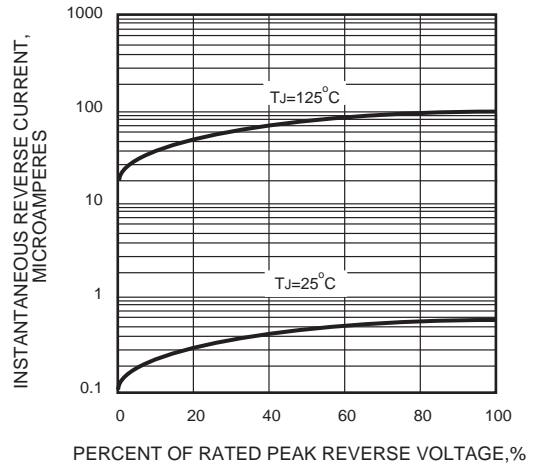


FIG.5 - TYPICAL JUNCTION CAPACITANCE

