

FE1A ~ FE1G

PRV : 50 - 400 Volts
Io : 1.0 Amperes

FEATURES :

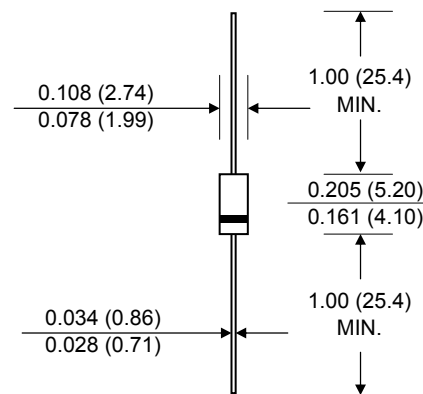
- * Superfast recovery time for high efficiency
- * High surge current capability
- * High current capability
- * Low leakage current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.335 gram

SUPER FAST RECTIFIERS

DO - 41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	FE1A	FE1B	FE1D	FE1F	FE1G	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	V
Maximum Reverse Voltage	V _R	50	100	200	300	400	V
Maximum Average Forward Current, R-load, Ta = 75 °C	I _{F(AV)}	1.0					A
Maximum Repetitive Peak Forward Current, f > 15 Hz (Note 1)	I _{FRM}	10					A
Peak Forward Surge Current , 60 Hz half sine- wave	I _{FSM}	30					A
Maximum Forward Voltage at I _F = 1 A	V _F	0.95				1.25	V
Maximum Reverse Current at V _R = V _{RRM} , T _J = 25 °C at V _R = V _{RRM} , T _J = 100 °C	I _R	2.0					μA
	I _{R(H)}	50					
Maximum Reverse Recovery Time (Note 2)	T _{rr}	50					ns
Thermal Resistance Junction to Ambient	R _{θJA}	45					K/W
Thermal Resistance Junction to Lead	R _{θJL}	15					K/W
Operating Junction Temperature Range	T _J	- 50 to + 175					°C
Storage Temperature Range	T _{STG}	- 50 to + 175					°C

Notes :

- (1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case.
- (2) Reverse Recovery Test Conditions : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$.

RATING AND CHARACTERISTIC CURVES (FE1A ~ FE1G)

FIG.1 - FORWARD CURRENT DERATING CURVE

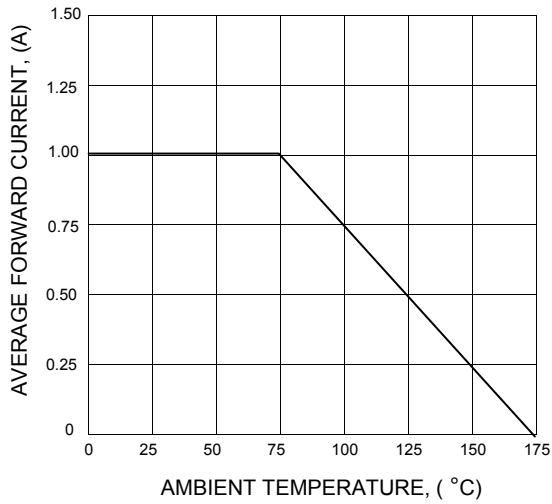


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

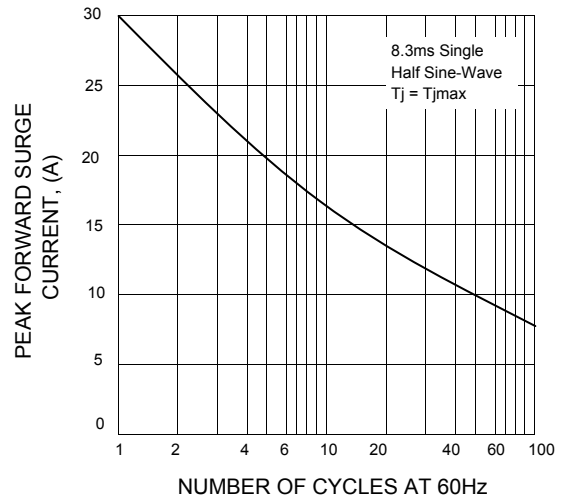


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

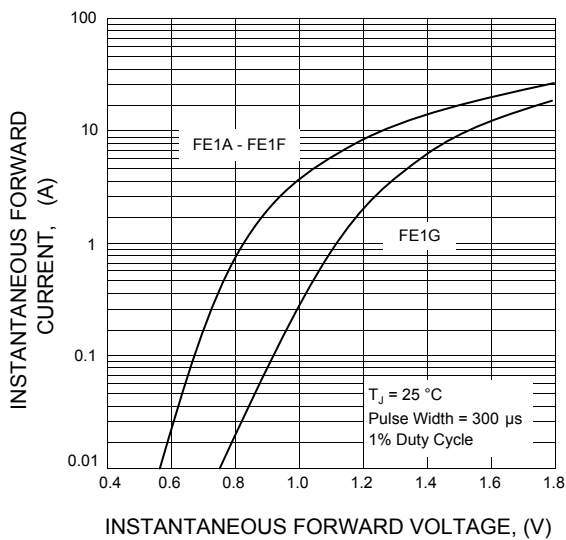


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

