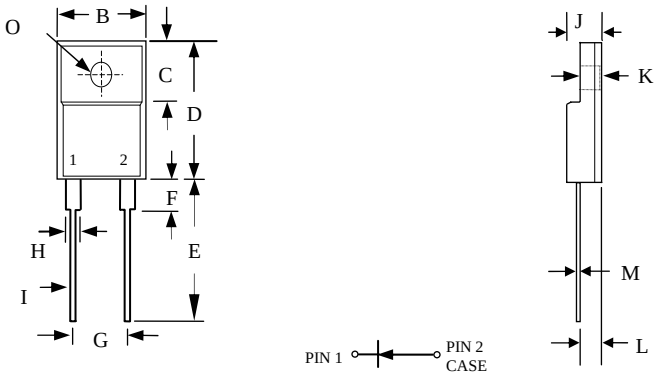
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16A FAST EFFICIENT GLASS PASSIVATED RECTIFIER

FEF160-02 THRU FEF160-06

CASE : ITO-220AC (FEF160-XX) , FULLY INSULATED PACKAGE



	MILLIMETERS	
	MIN	MAX
B	9.72	10.27
C	6.30	6.90
D	14.50	15.50
E	13.00	13.80
F	-	4.1
G	4.95	5.20
H	-	1.52
I	-	0.9
J	-	4.8
K	-	3.1
L	2.5	2.9
M	-	0.8
O		Ø 3.4

FEATURES
- GLASS PASSIVATED CHIP JUNCTION
- LOW FORWARD VOLTAGE
- LOW THERMAL RESISTANCE
- HIGH CURRENT CAPABILITY
- HIGH VOLTAGE

MECHANICAL DATA
- CASE: TRANSFER MOLDED
- TERMINAL: MIL-STD-202F METHOD 2026
- POLARITY: AS MARKED
- EPOXY: UL94V-0 FLAME RETARDANT MOLDING COMPOUND
- MOUNTING POSITION: ANY
- WEIGHT 1.81 GRAMS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	FEF160-02	FEF160-04	FEF160-06	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	200	400	600	V
MAXIMUM RMS VOLTAGE	V_{RMS}	140	280	420	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	200	400	600	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1	I_O	16.0			A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	150			A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	65			PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jC}$	2.2			℃/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150			℃
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 150			℃

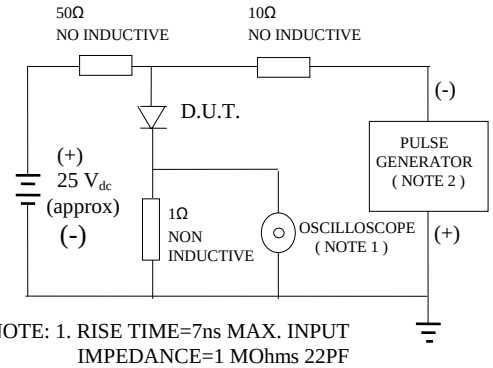
ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	FEF160-02	FEF160-04	FEF160-06	UNITS
MAXIMUM FORWARD VOLTAGE AT Io PER LEG	V_F	0.98	1.25	1.90	V
MAXIMUM DC REVERSE CURRENT AT TA=25°C	I_R	10			μA
MAXIMUM DC REVERSE CURRENT AT TA=100°C	I_R	100			μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	25			nS

NOTES: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE 0F 4.0 VOLTS
2. THERMAL RESISTANCE JUNCTION TO CASE PER LEG MOUNTED ON HEAT SINK
3. REVERSE RECOVERY TEST CONDITIONS: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

RATINGS AND CHARACTERISTIC CURVE FEF160-02 THRU FEF160-06

FIG. 1 -TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
2. RISE TIME =10 ns MAX. SOURCE IMPEDANCE=50 OHMS

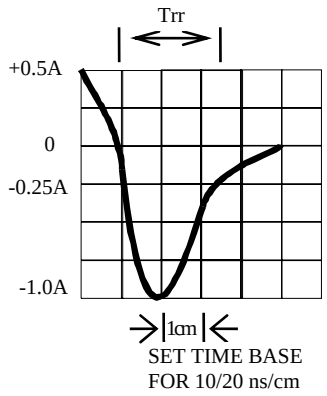


FIG. 2 -MAXIMUM FORWARD CURRENT DERATING CURVE

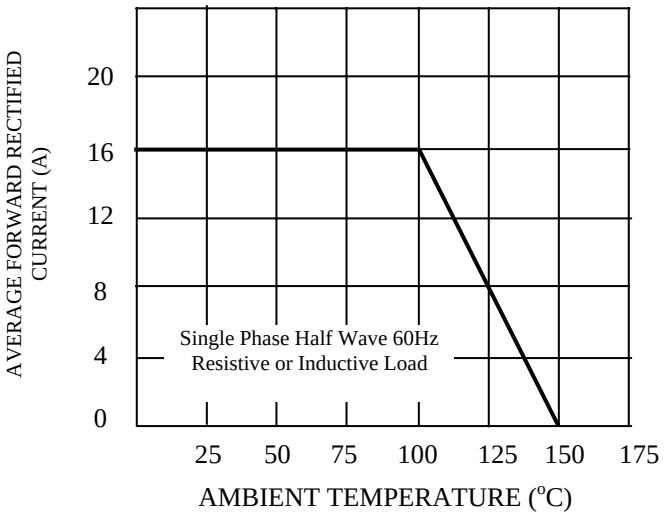


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

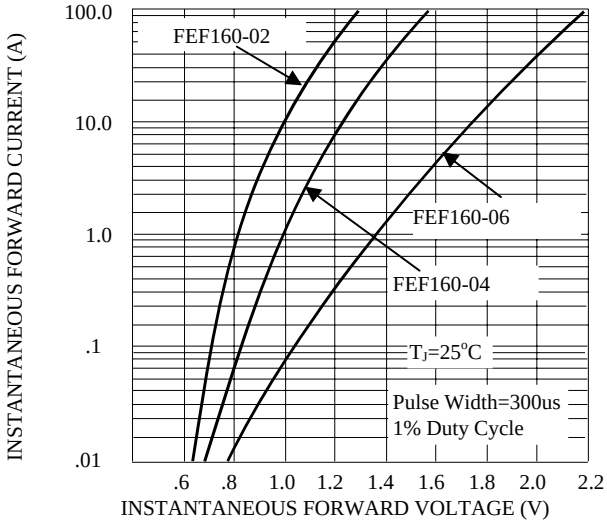


FIG. 4 -TYPICAL REVERSE CHARACTERISTICS

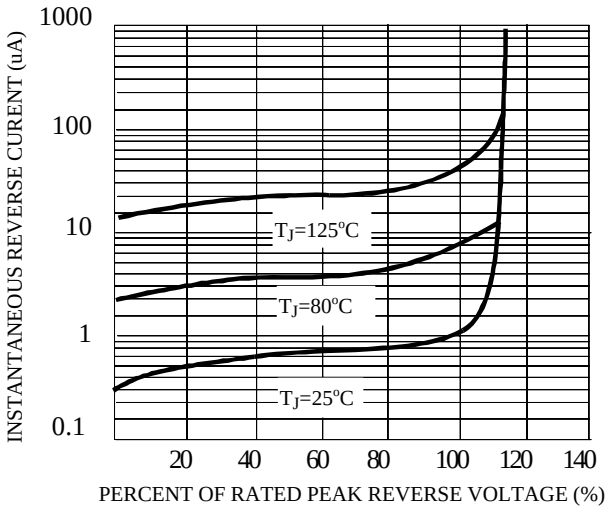


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

