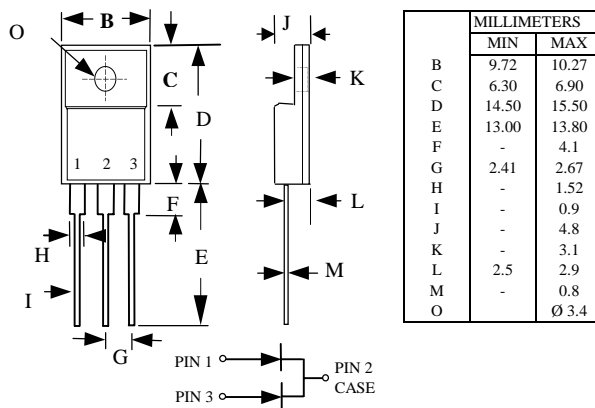




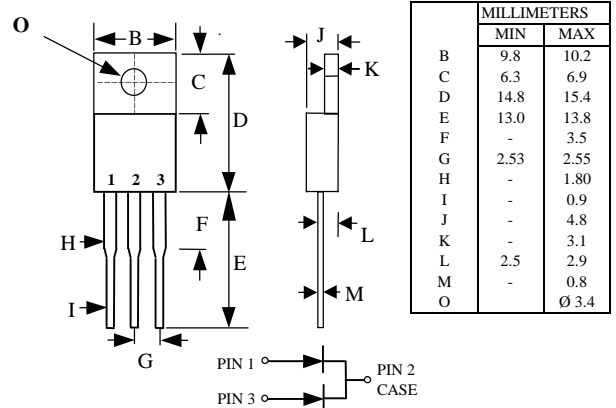
**UF160-005 THRU UF160-06  
AND  
UFF160-005 THRU UFF160-06**

**16A ULTRA FAST RECOVERY RECTIFIER**

**CASE : ITO-220AB( UFF160-xx ), FULLY INSULATED PACKAGE**



**CASE : TO-220( UF160-xx )**



**FEATURES**

- ULTRA FAST RECOVERY TIME
- LOW FORWARD VOLTAGE
- LOW THERMAL RESISTANCE
- HIGH CURRENT CAPABILITY
- HIGH VOLTAGE
- GLASS PASSIVATED CHIP JUNCTION

**MECHANICAL DATA**

- CASE : TRANSFER MOLDED
- TERMINAL : MIL-STD-202F METHOD 208
- POLARITY : AS MARKED
- EPOXY : UL94V-0 FLAME RETARDANT MOLDING COMPOUND
- WEIGHT : 2.05 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	UF160	UF160	UF160	UF160	UF160	UF160	UF160	UF160	UNITS
		-005	-01	-015	-02	-03	-04	-05	-06	
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	50	100	150	200	300	400	500	600	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	35	70	105	140	210	280	350	420	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	50	100	150	200	300	400	500	600	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1	$I_O$	16.0								A
PEAK FORWARDSURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	200								A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	65								PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jc}$	2.2								°C/W
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150								°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 150								°C

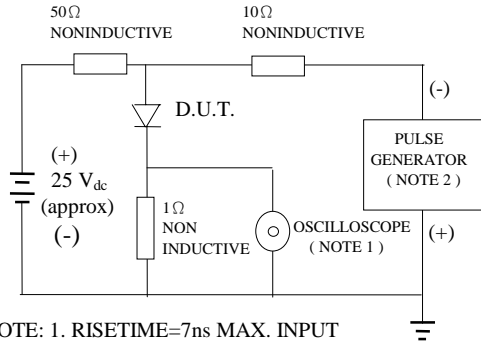
**ELECTRICAL CHARACTERISTICS (At TA =25°C UNLESS OTHERWISE NOTED)**

CHARACTERISTICS	SYMBOL	UF160	UF160	UF160	UF160	UF160	UF160	UF160	UF160	UNIT	
		-005	-01	-015	-02	-03	-04	-05	-06		
MAXIMUM FORWARD VOLTAGE AT $I_O$ DC	$V_F$	0.95			1.3		1.5			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)	$T_{RR}$	35				50					nS

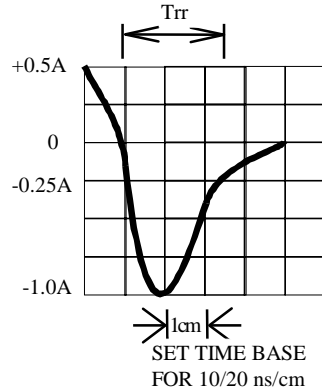
NOTES : 1.MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS  
 2.THERMAL RESISTANCE JUNCTION TO CASE PER LEG MOUNTED ON HEATSINK  
 3.REVERSE RECOVERY TEST CONDITIONS:  $I_f=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$

# RATINGS AND CHARACTERISTIC CURVE UF(F)160-005 THRU UF(F)160-06

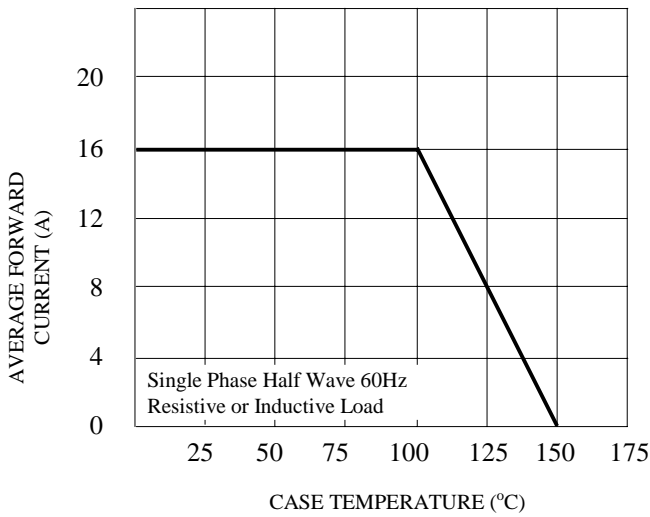
**FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



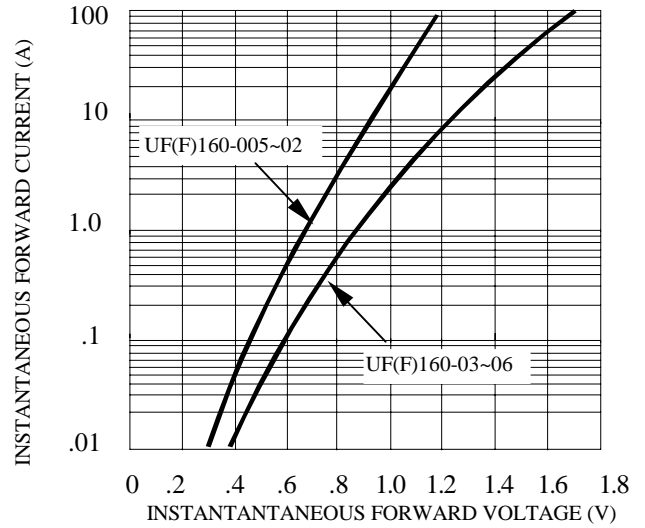
NOTE: 1. RISE TIME = 7 ns MAX. INPUT IMPEDANCE = 1 MEGOHM 22PF  
 2. RISE TIME = 10 ns MAX. SOURCE IMPEDANCE = 50 OHMS



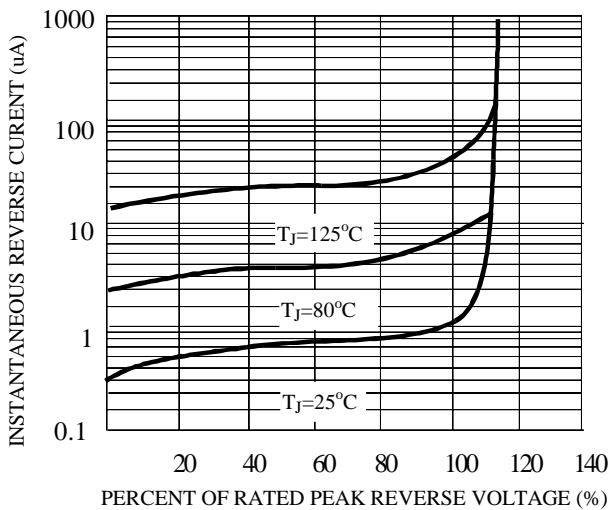
**FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

