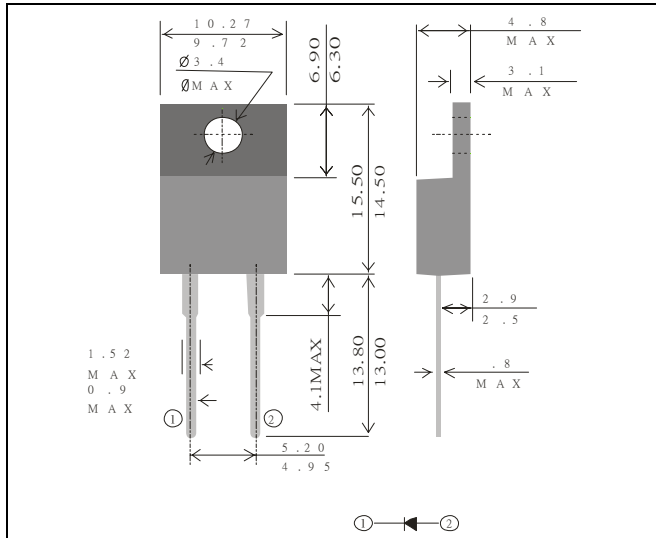


8A ULTRA FAST RECOVERY RECTIFIER



CASE : ITO-220AC

DIMENSIONS IN MILLIMETERS

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 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.

PARAMETER	SYMBOL	UFF80-005	UFF80-01	UFF80-02	UFF80-03	UFF80-04	UFF80-05	UFF80-06	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	200	300	400	500	600	V
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	140	210	280	350	420	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	200	300	400	500	600	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	I_O	8.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	125							A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JC}$	3.5							°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150							°C
OPERATING TEMPERATURE RANGE	T_J	-55 TO + 150							°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	UFF80-005	UFF80-01	UFF80-02	UFF80-03	UFF80-04	UFF80-05	UFF80-06	UNITS
MAXIMUM FORWARD VOLTAGE AT 8.0A	V_F	0.95			1.30		1.50		V
MAXIMUM DC REVERSE CURRENT	I_R	10							μA
		100							
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	85					60		pF
MAXIMUM REVERSE RECOVERY TIME(NOTE 3)	T_{RR}	35		50					nS

- NOTE: 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: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

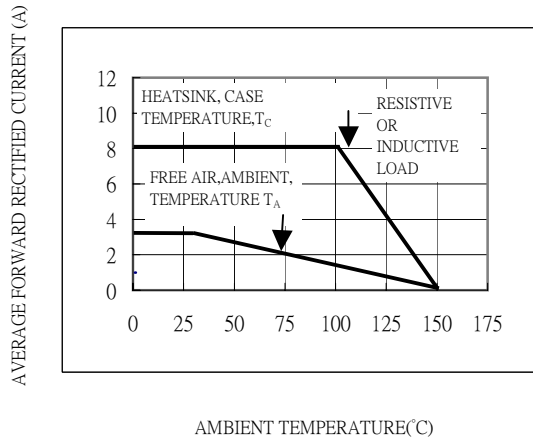


Fig.1-MAXIMUM FORWARD CURRENT DERATING CURVE

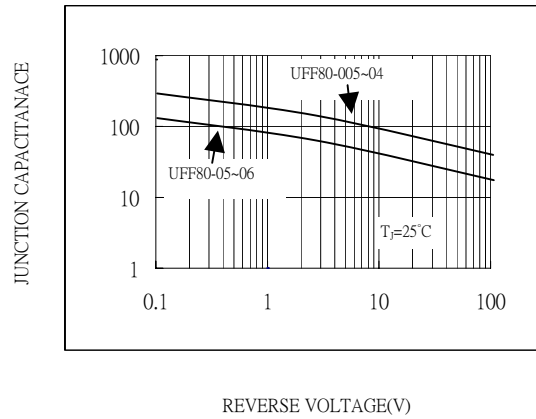


Fig.2-TYPICAL JUNCTION CAPACITANCE

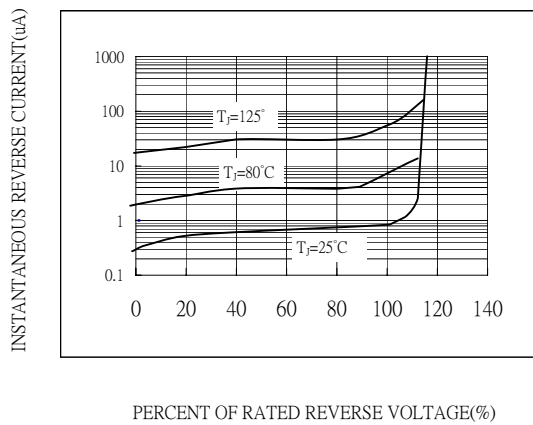


Fig.3-TYPICAL REVERSE CHARACTERISTICS

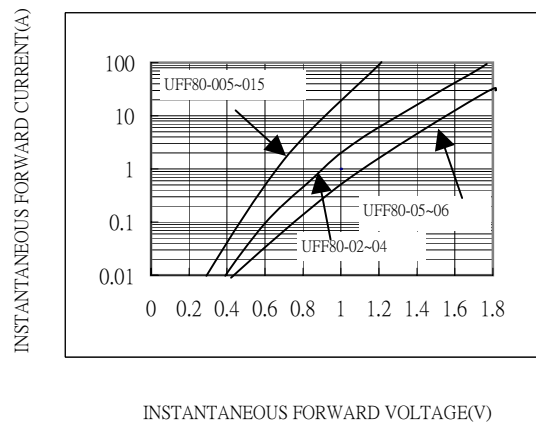


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS