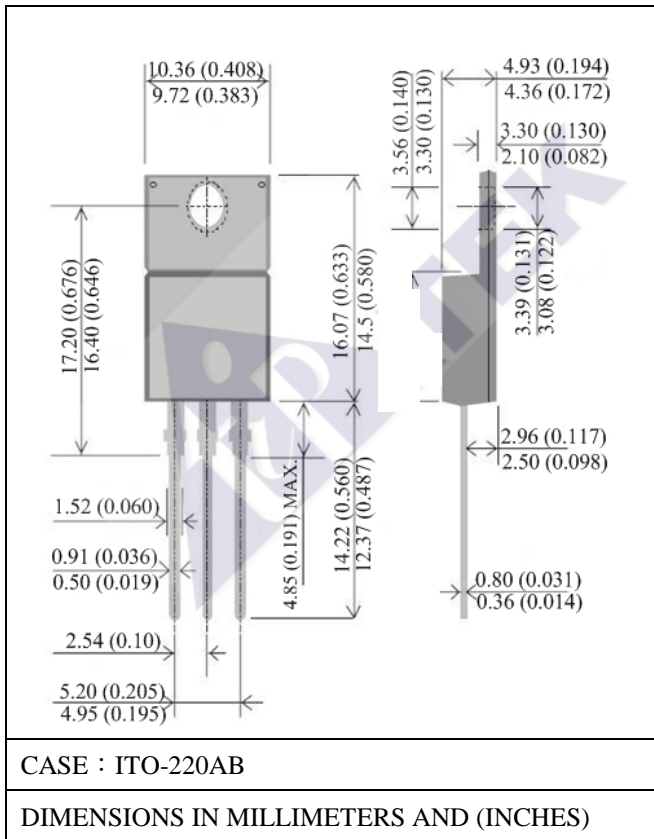


20A HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIERS

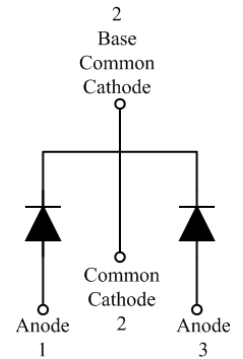


FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND

MECHANICAL DATA

- CASE : ITO-220AB
- LEADS : SOLDERABLE PER MIL-STD-202G, METHOD 208
- POLARITY : AS MARKED
- Pb Free: MBR20100FCT
Halogen Free: MBR20100FCT -H



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PARAMETER	SYMBOL	VALUE	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	100	V
MAXIMUM RMS VOLTAGE	V_{RMS}	70	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT	I_O	20	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD PER LEG	I_{FSM}	150	A
TYPICAL JUNCTION CAPACITANCE (NOTE1)	C_j	300	pF
TYPICAL THERMAL RESISTANCE JUNCTION TO CASE AT 25°C PER LEG	$R_{\theta JC}$	2.2	°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 65 TO + 175	°C
OPERATING TEMPERATURE RANGE	T_J	- 65 TO + 175	°C

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

PARAMETER	SYMBOL	VALUE	UNITS
MAXIMUM FORWARD VOLTAGE AT 10A	V_F	0.85	V
MAXIMUM DC REVERSE CURRENT PER LEG	25°C	I_R	0.1 mA
	100°C	I_R	20.0 mA

NOTE: 1. MEASURED AT 1.0MHz AND APPLIED REVERSE VOLTAGE OF 4.0V DC.

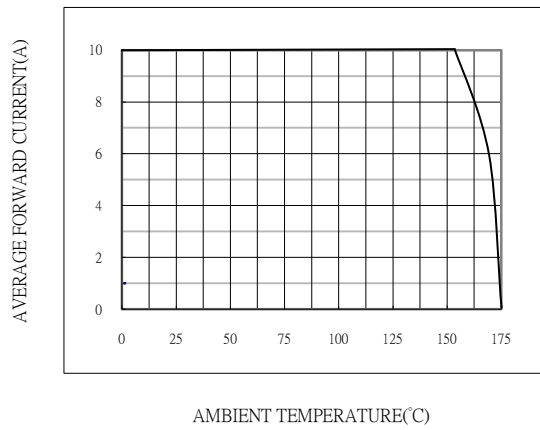


Fig.1-FORWARD CURRENT DERATING CURVE (PER DIODE)

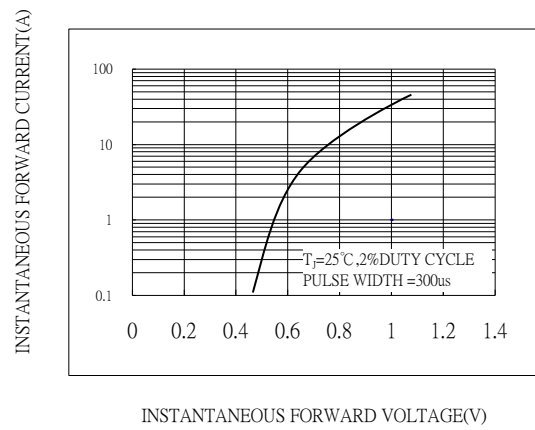


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(PER DIODE)

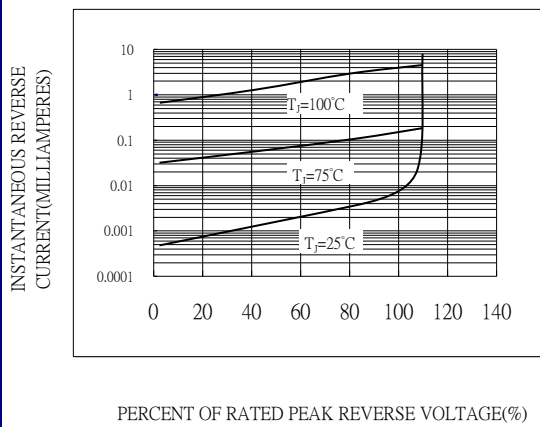


Fig.3-TYPICAL REVERSE CHARACTERISTICS

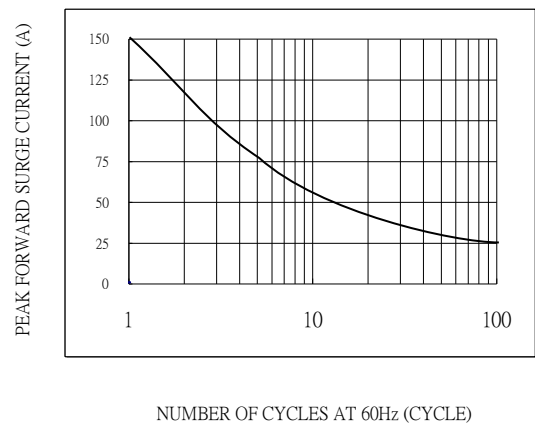


Fig.4- PEAK FORWARD SURGE CURRENT