

SWITCHING MODE POWER SUPPLY APPLICATION.
CONVERTER & CHOPPER APPLICATION.

FEATURES

- Average Output Rectified Current : $I_O=10A$.
- Repetitive Peak Reverse Voltage : $V_{RRM}=45V$.
- Fast Reverse Recovery Time : $t_{rr}=35ns$.
- Suffix U : Qualified to AEC-Q101.
ex) MBRF10U45CTA-U/PU

MAXIMUM RATING (Ta=25)

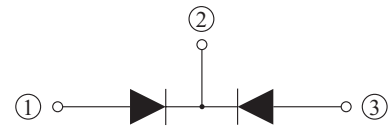
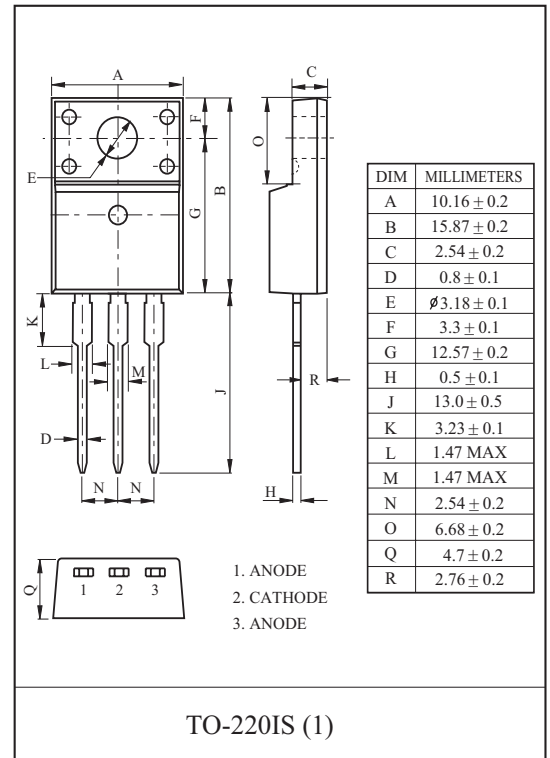
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Average Output Rectified Current (Tc=125) (Note)	I_O	10	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	I_{FSM}	100	A
Junction Temperature	T_j	-40 150	
Storage Temperature Range	T_{stg}	-55 150	

Note : average forward current of centertap full wave connection.

ELECTRICAL CHARACTERISTICS (Ta=25)

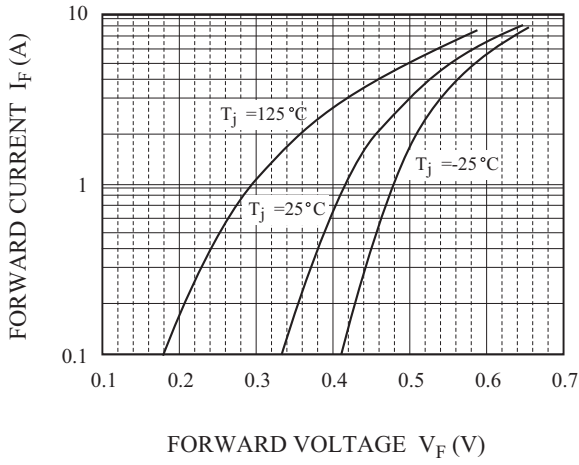
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage (Note)	V_{FM}	$I_{FM}=5A$	-	-	0.70	V
Repetitive Peak Reverse Current (Note)	I_{RRM}	$V_{RRM}=\text{Rated}$	-	-	100	μA
Reverse Recovery Time (Note)	t_{rr}	$I_F=1.0A, di/dt=-30A/\mu s$	-	-	35	ns
Thermal Resistance (Note)	$R_{th(j-c)}$	Junction to Case	-	-	4.5	/W

Note : A value of one cell

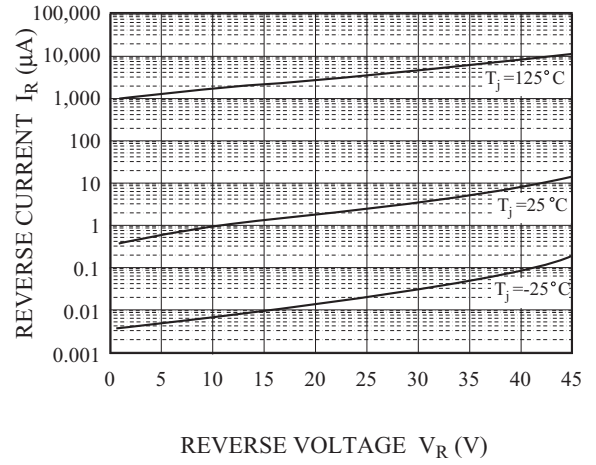


MBRF10U45CTA

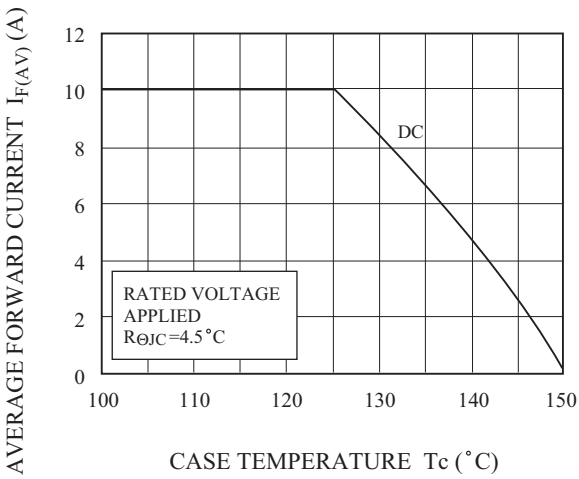
$I_F - V_F$



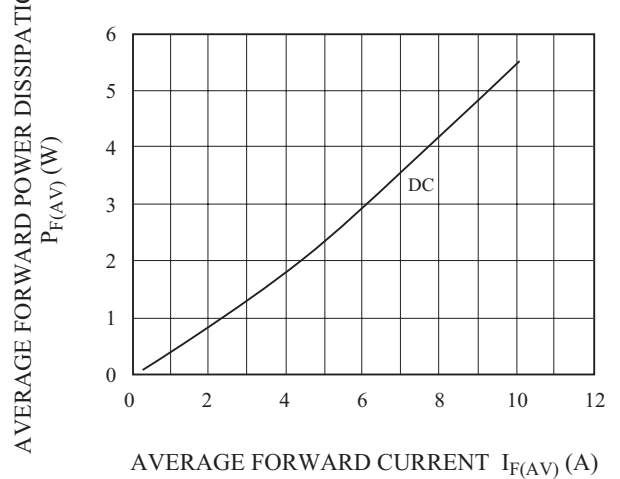
$I_R - V_R$



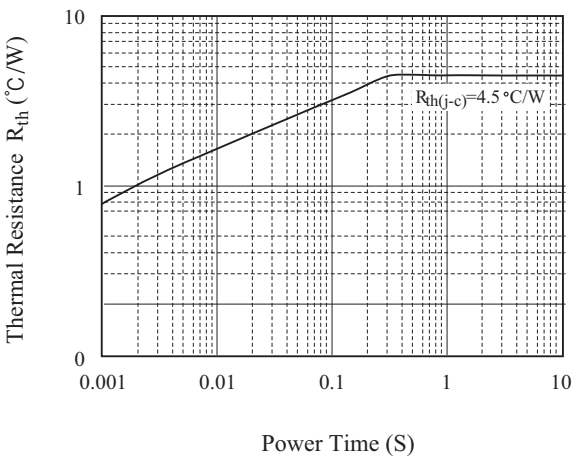
$I_F - T_c$



$P_{F(AV)} - I_{F(AV)}$



$R_{th(j-c)}$



$P_R - V_R$

