

SWITCHING MODE POWER SUPPLY APPLICATION.  
CONVERTER & CHOPPER APPLICATION.

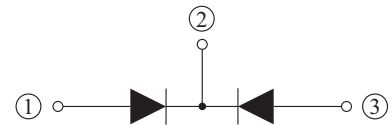
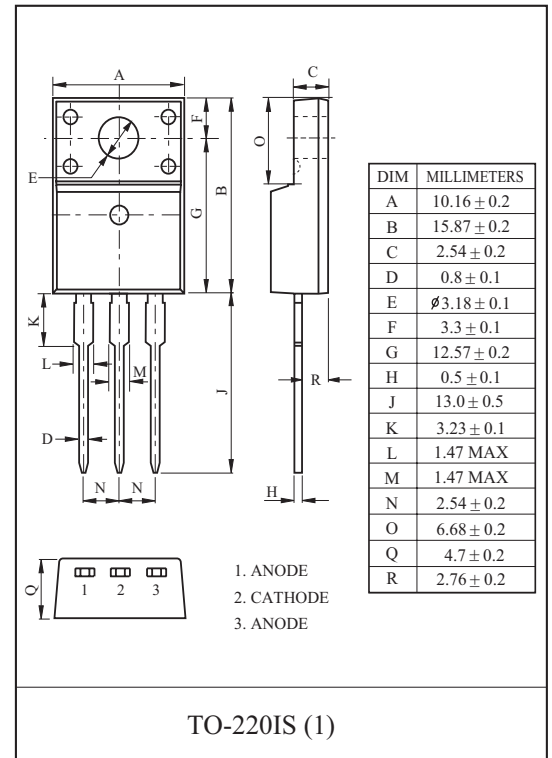
### FEATURES

- Average Output Rectified Current :  $I_O=30A$ .
- Repetitive Peak Reverse Voltage :  $V_{RRM}=150V$ .
- Low Forward Voltage.
- Low Reverse Current.
- Molding Compound Flammability Rating : UL 94V-0
- Pb-Free, Halogen-Free, RoHs Compliant

### MAXIMUM RATING (Ta=25 )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	150	V
Average Output Rectified Current (Tc=75 ) (Note)	$I_O$	30	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	$I_{FSM}$	215	A
Junction Temperature	$T_j$	-40 150	
Storage Temperature Range	$T_{stg}$	-55 150	

Note : average forward current of centertap full wave connection.



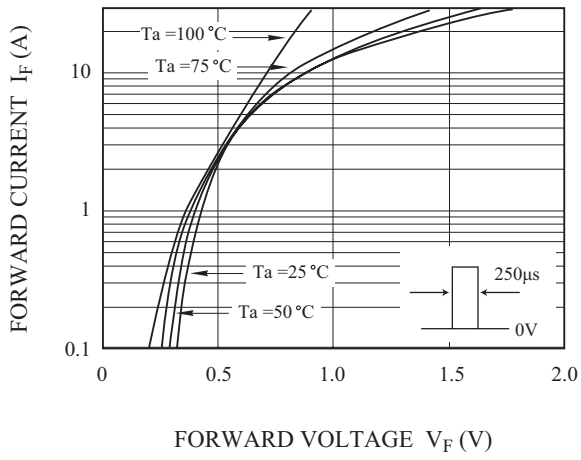
### ELECTRICAL CHARACTERISTICS (Ta=25 )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage (Note)	$V_{FM}$	$I_{FM}=1A$	-	0.45	-	V
		$I_{FM}=7.5A$	-	0.80	-	
		$I_{FM}=15A$	-	1.10	1.20	
Repetitive Peak Reverse Current (Note)	$I_{RRM}$	$V_{RRM}=150V$	-	5	100	$\mu A$
Reverse Recovery Time (Note)	$t_{rr}$	$I_F=1A, V_R=30V, di/dt=-50A/\mu s$	-	27	35	nS
Total Capacitance (Note)	$C_T$	$V_R=0V, f=1MHz$	-	1250	-	pF
Thermal Resistance (Note)	$R_{th(j-c)}$	Junction to Case	-	-	4	/W

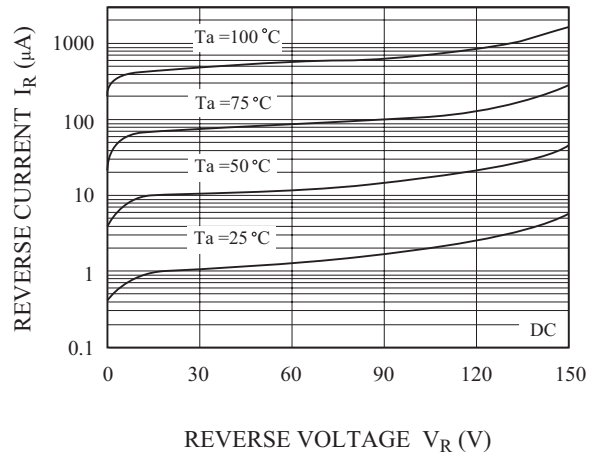
Note : A value of one cell

# TMBRF30150CT

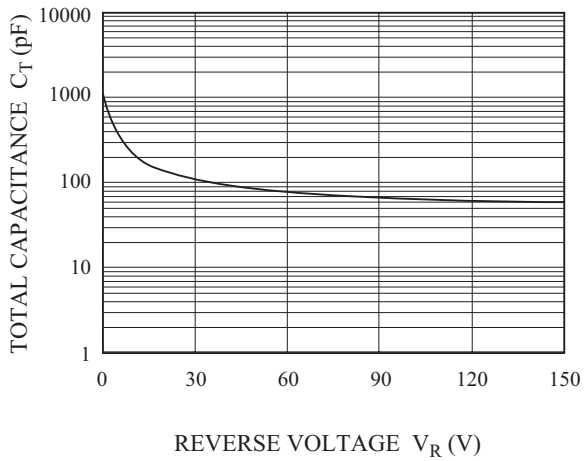
$I_F - V_F$



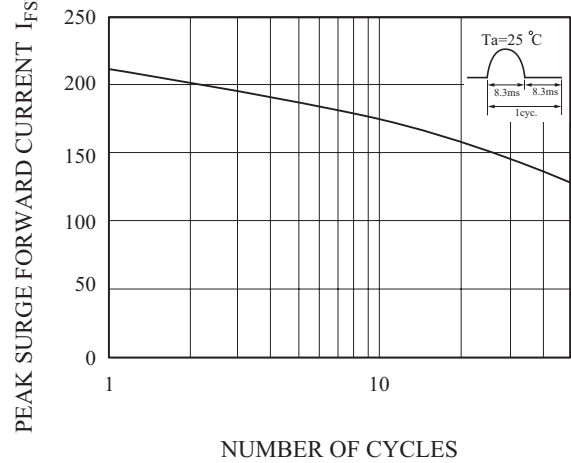
$I_R - V_R$



$C_T - V_R$



$I_{FSM} - \text{CYCLE CHARACTERISTICS}$



$P_D - T_C$

