

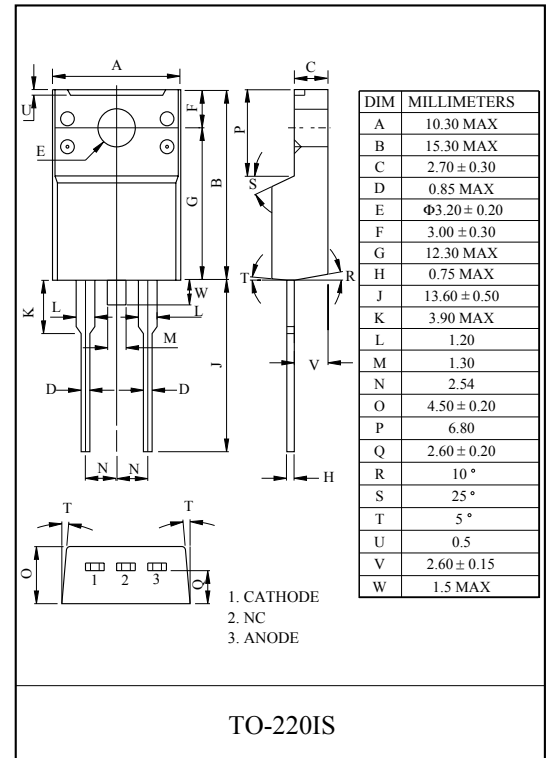
SWITCHING TYPE POWER SUPPLY APPLICATION.
CONVERTER & CHOPPER APPLICATION.

FEATURES

- Average Output Rectified Current
: $I_O=5A$ ($T_c=115^\circ C$).
- Repetitive Peak Reverse Voltage
: $V_{RRM}=90V$.
- Fast Reverse Recovery Time : $t_{rr}=35ns$.
- Low Peak Forward Voltage : $0.70V$ (Typ.)

MAXIMUM RATING ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	90	V
Average Output Rectified Current ($T_c=115^\circ C$)	I_O	5	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	I_{FSM}	100	A
Junction Temperature	T_j	-40 ~ 150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$

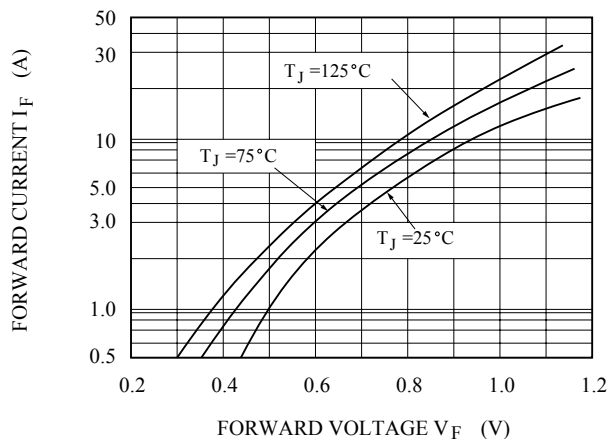


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

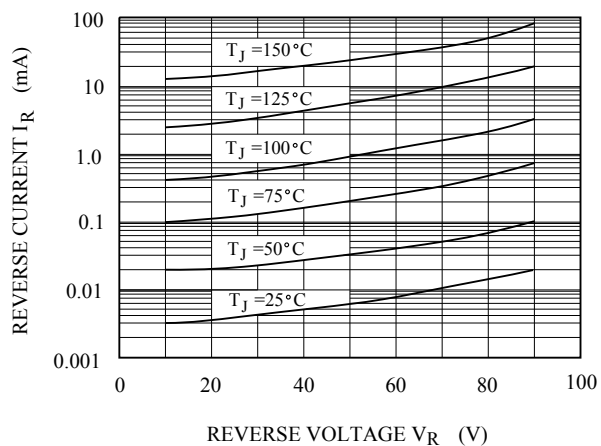
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM}=5A, T_c=25^\circ C$	-	0.70	0.75	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=\text{Rated}$	-	-	3	mA
Reverse Recovery Time	t_{rr}	$I_F=1.0A, di/dt=-20A/\mu s$	-	-	35	ns
Thermal Resistance	$R_{th(j-c)}$	Juction to Case	-	-	4.5	$^\circ C/W$

B5A90VI

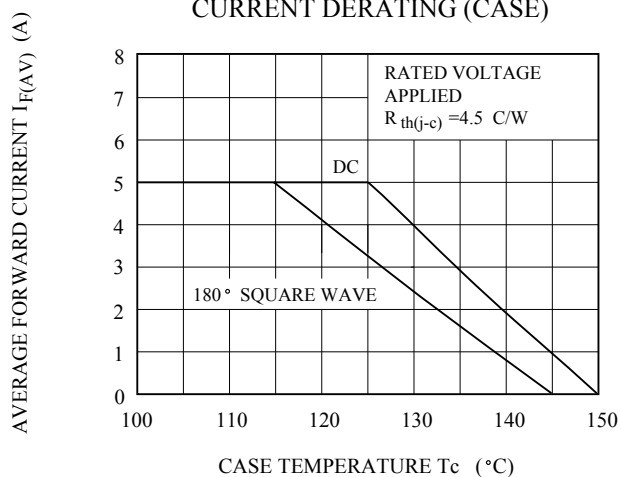
$I_F - V_F$



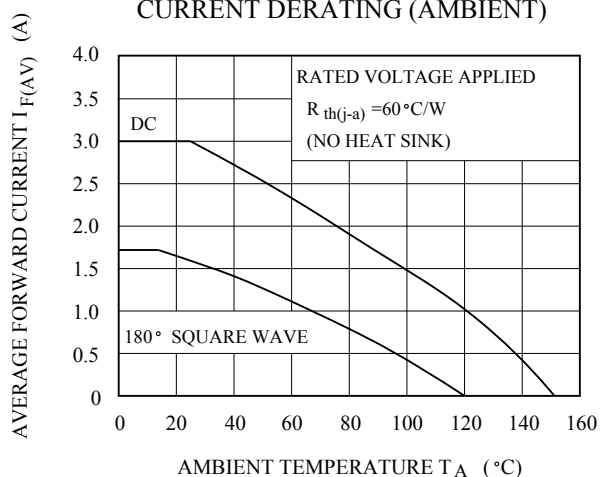
$I_R - V_R$



CURRENT DERATING (CASE)



CURRENT DERATING (AMBIENT)



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

