KEC

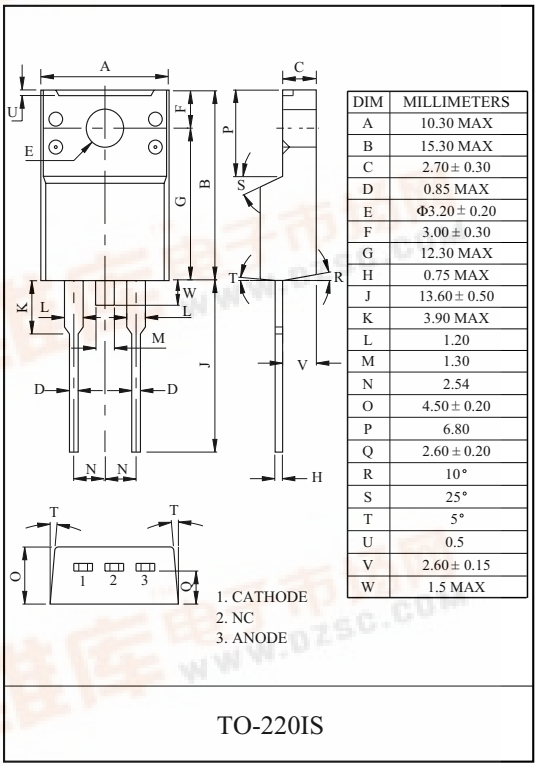
SEMICONDUCTOR
TECHNICAL DATA

B5A100VI
SCHOTTKY BARRIER TYPE DIODE

SWITCHING TYPE POWER SUPPLY APPLICATION.
CONVERTER & CHOPPER APPLICATION.

FEATURES

· Average Output Rectified Current
: I_O=5A (Tc=115℃).
· Repetitive Peak Reverse Voltage
: V_{RRM}=100V.
· Fast Reverse Recovery Time : t_{rr}=35ns.
· Low Peak Forward Voltage : 0.75V(Typ.)



DIM	MILLIMETERS
A	10.30 MAX
B	15.30 MAX
C	2.70 ± 0.30
D	0.85 MAX
E	Φ3.20 ± 0.20
F	3.00 ± 0.30
G	12.30 MAX
H	0.75 MAX
J	13.60 ± 0.50
K	3.90 MAX
L	1.20
M	1.30
N	2.54
O	4.50 ± 0.20
P	6.80
Q	2.60 ± 0.20
R	10°
S	25°
T	5°
U	0.5
V	2.60 ± 0.15
W	1.5 MAX

TO-220IS

MAXIMUM RATING (Ta=25℃)

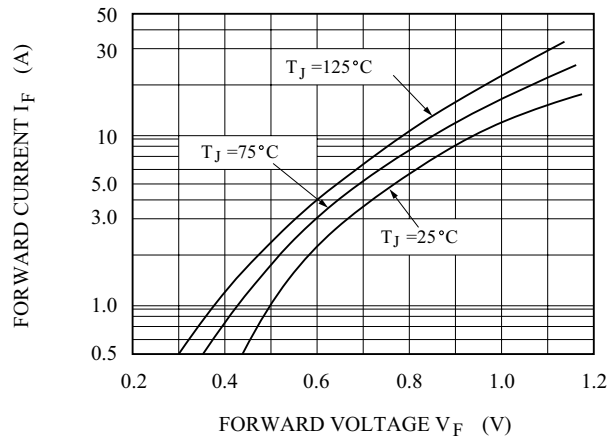
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average Output Rectified Current (Tc=115℃)	I_O	5	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	I_{FSM}	100	A
Junction Temperature	T_j	-40 ~150	℃
Storage Temperature Range	T_{stg}	-55 ~150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

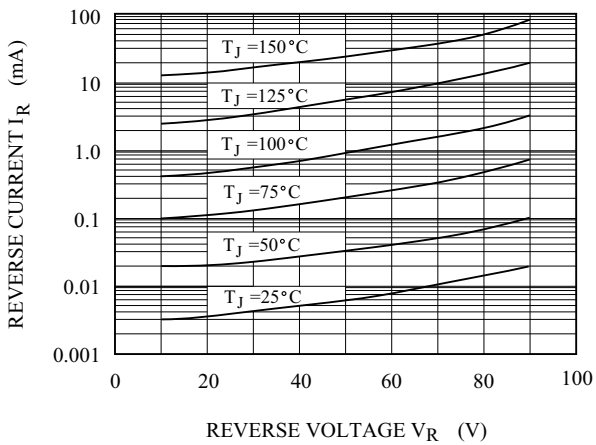
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM}=5A, Tc=25℃	-	0.75	0.80	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM}=Rated	-	-	3	mA
Reverse Recovery Time	t_{rr}	I_F=1.0A, di/dt=-20A/㎲	-	-	35	ns
Thermal Resistance	$R_{th(j-c)}$	Juction to Case	-	-	4.5	℃/W

B5A100VI

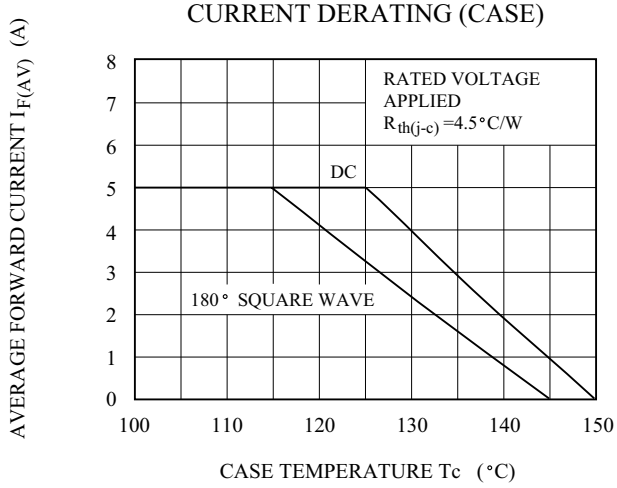
I_F - V_F



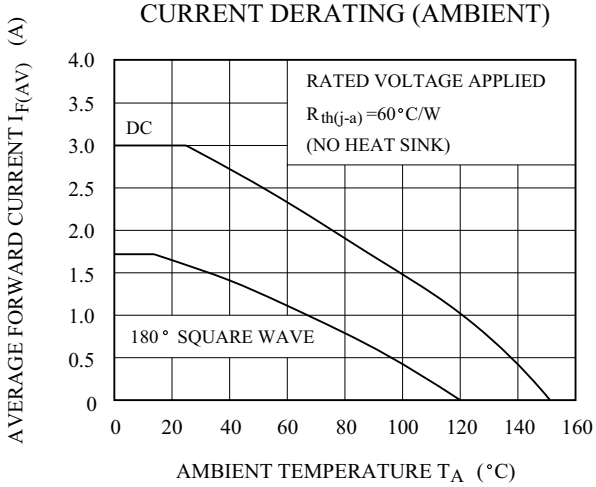
I_R - V_R



CURRENT DERATING (CASE)



CURRENT DERATING (AMBIENT)



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