

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

### FEATURES

- Average Forward Current :  $I_O=50A$ .
- Zener Voltage : 37V(Typ.)

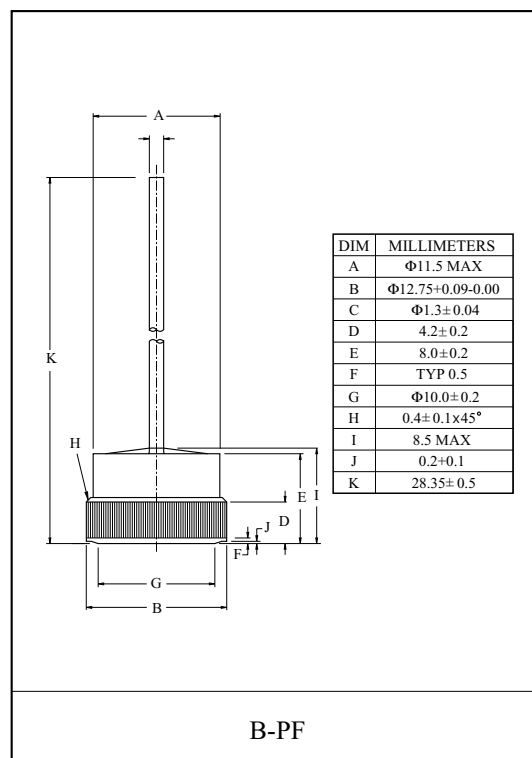
### POLARITY

E50A37VBS (+ Type)

E50A37VBR (- Type)

### MAXIMUM RATING (Ta=25 )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Average Forward Current	$I_{F(AV)}$	50	A
Peak 1 Cycle Surge Current	$I_{FM}$	300 (60Hz)	A
Repetitive Peak Reverse Surge Current (Pulse width=10mS)	$I_{RM}$	50	A
Transient Peak Reverse Voltage	$V_{RSM}$	33	V
Peak Reverse Voltage	$V_{RM}$	32	V
Junction Temperature	$T_j$	215	
Storage Temperature Range	$T_{stg}$	-40 ~ 175	



### ELECTRICAL CHARACTERISTICS (Ta=25 )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F$	$I_{FM}=100A$	-	-	1.10	V
Zener Voltage	$V_Z$	$I_Z=10mA$	34	37	40	V
Reverse Current	$I_R$	$V_R=32V$	-	-	10	μA
Transient Thermal Resistance	$V_F$	$I_{FM}=100A, I_M=100mA, Pw=100mS$	-	-	60	mV
Breakdown Voltage	$V_{br}$	$I_{RSM}=50A, Pw=10mS$	-	-	55	V
Temperature Coefficient	$T$	$I_Z=10mA$	-	27	-	mV/
Reverse Leakage Current Under High Temperature	$HI_R$	$T_a=150, V_R=32V$	-	-	100	μA
Temperature Resistance	$R_{th}$	DC total junction to case	-	-	0.6	/W