

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

### FEATURES

- Average Forward Current :  $I_O=65A$ .
- Zener Voltage : 27V(Typ.)

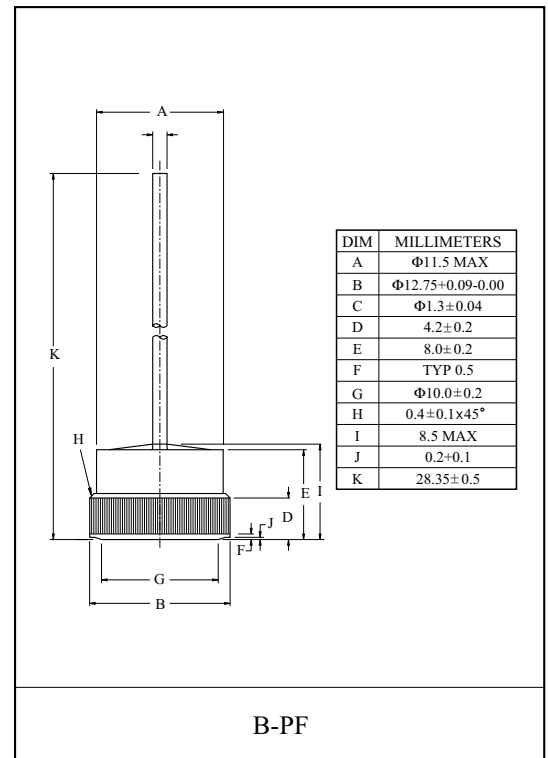
### POLARITY

E65A27VBS (+ Type)

E65A27VBR (- Type)

### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Average Forward Current	$I_{F(AV)}$	65	A
Peak 1 Cycle Surge Current	$I_{FSM}$	450 (60Hz)	A
Non-Repetitive Peak Reverse Surge Current (10mS)	$I_{RSM}$	65	A
Transient Peak Reverse Voltage	$V_{RSM}$	20	V
Peak Reverse Voltage	$V_{RM}$	20	V
Junction Temperature	$T_j$	-40 ~ 215	°C
Storage Temperature Range	$T_{stg}$	-40 ~ 215	°C



### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F$	$I_{FM}=100A$	-	-	1.05	V
Zener Voltage	$V_Z$	$I_Z=10mA$	24	27	29	V
Reverse Current	$I_R$	$V_R=20V$	-	-	0.2	μA
Transient Thermal Resistance	$\Delta V_F$	$I_{FM}=100A, I_M=100mA, P_w=100mS$	-	-	50	mV
Breakdown Voltage	$V_{br}$	$I_{RSM}=65A, P_w=10mS$	-	-	34	V
Temperature Coefficient	$\alpha_T$	$I_Z=10mA$	-	15.7	-	mV/°C
Reverse Leakage Current Under High Temperature	$HI_R$	$T_a=150\text{ °C}, V_R=20V$	-	-	100	μA
Temperature Resistance	$R_{th}$	DC total junction to case	-	-	0.6	°C/W