

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

- Average Forward Current : $I_O=50A$.
- Zener Voltage : 27V(Typ.)

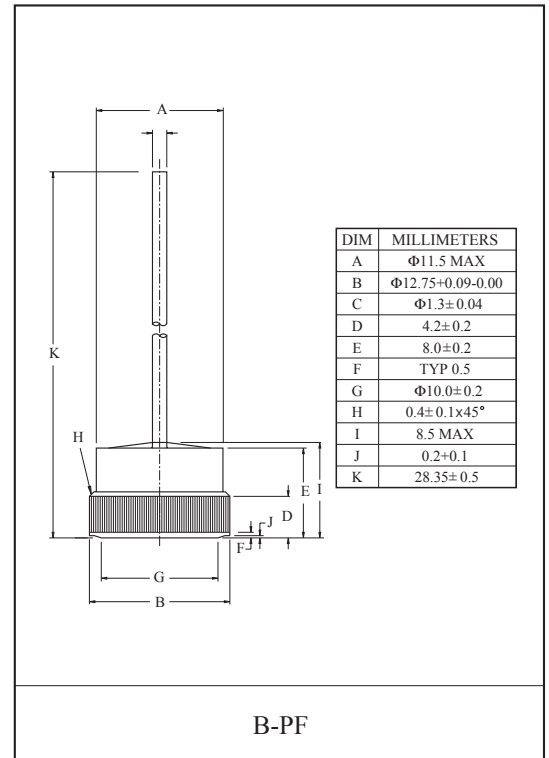
POLARITY

E50A27VBS (+ Type)

E50A27VBR (- Type)

MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|--|-------------|------------|------|
| Average Forward Current | $I_{F(AV)}$ | 50 | A |
| Peak 1 Cycle Surge Current | I_{FSM} | 380 (60Hz) | A |
| Non-Repetitive Peak Reverse Surge Current (10mS) | I_{RSM} | 55 | A |
| Transient Peak Reverse Voltage | V_{RSM} | 22 | 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 |
|--|--------------|-------------------------------------|------|------|------|-------|
| Peak 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 | ΔV_F | $I_{FM}=100A, I_M=100mA, P_w=100mS$ | - | - | 60 | mV |
| Breakdown Voltage | V_{br} | $I_{rsm}=55A, P_w=10mS$ | - | - | 34 | V |
| Temperature Coefficient | α_T | $I_Z=10mA$ | - | 15.7 | - | mV/°C |
| Reverse Leakage Current Under High Temperature | HI_R | $T_a=150^\circ C, V_R=20V$ | - | - | 100 | μA |
| Temperature Resistance | R_{th} | DC total junction to case | - | - | 0.6 | °C/W |