

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

- Average Forward Current : $I_O=35A$.
- Zener Voltage : 37V(Typ.)

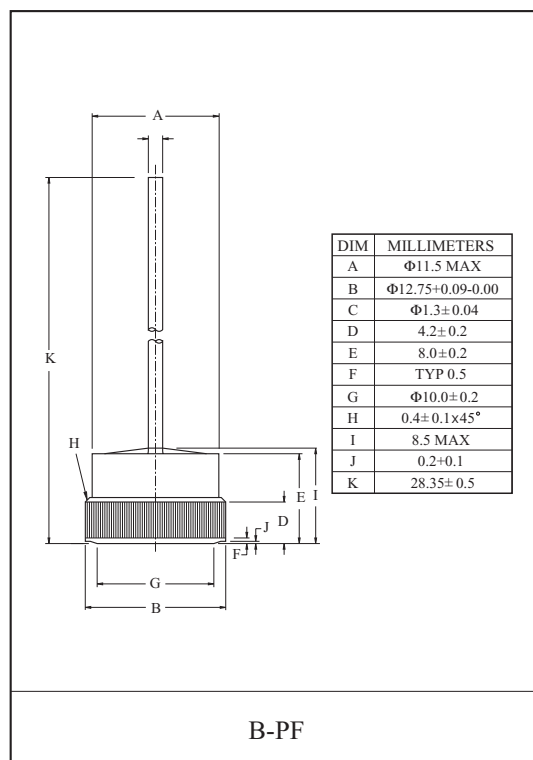
POLARITY

E35A37VBS (+ Type)

E35A37VBR (- Type)

MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|--|-------------|------------|------|
| Average Forward Current | $I_{F(AV)}$ | 35 | A |
| Peak 1 Cycle Surge Current | I_{FSM} | 300 (60Hz) | A |
| Repetitive Peak Reverse Surge Current (Pulse width=10mS) | I_{RSM} | 35 | A |
| Transient Peak Reverse Voltage | V_{RSM} | 34 | V |
| Peak Reverse Voltage | V_{RM} | 32 | 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 | $I_{FM}=100A$ | - | - | 1.15 | V |
| Zener Voltage | V_Z | $I_Z=10mA$ | 34 | 37 | 40 | V |
| Reverse Current | I_R | $V_R=32V$ | - | - | 10 | μA |
| Transient Thermal Resistance | ΔV_F | $I_{FM}=100A, I_M=100mA, Pw=100mS$ | - | - | 70 | mV |
| Breakdown Voltage | V_{br} | $I_{rsm}=35A, Pw=10mS$ | - | - | 55 | V |
| Temperature Coefficient | α_T | $I_Z=10mA$ | - | 27 | - | mV/°C |
| Reverse Leakage Current Under High Temperature | HI_R | $T_a=150\text{ °C}, V_R=32V$ | - | - | 100 | μA |
| Temperature Resistance | R_{th} | DC total junction to case | - | - | 0.8 | °C/W |