

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

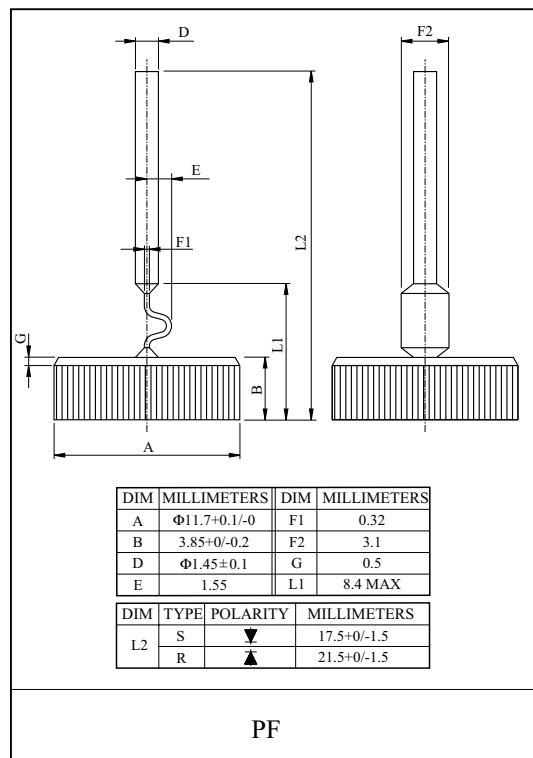
- Average Forward Current : $I_O=30A$.
- Zener Voltage : 37V(Typ.)

POLARITY

E30A37VPS E30A37VPR
(+ Type) (- Type)

MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|--|-------------|------------|------|
| Average Forward Voltage | $I_{F(AV)}$ | 30 | A |
| Peak 1 Cycle Surge Current | I_{FSM} | 300 (50Hz) | A |
| Non-Repetitive Peak Reverse Surge Current (10mS) | I_{RSM} | 30 | A |
| Transient Peak Reverse Voltage | V_{RSM} | 32 | V |
| Peak Reverse Voltage | V_{RM} | 32 | V |
| Junction Temperature | T_j | -40 ~200 | °C |
| Storage Temperature Range | T_{stg} | -40 ~200 | °C |



ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--|--------------|-------------------------------|------|------|------|---------|
| Peak Forward Voltage | V_{FM} | $I_{FM}=100A$ | - | - | 1.2 | V |
| Zener Voltage | V_Z | $I_Z=10mA$ | 34 | 37 | 40 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_R=V_{RM}$ | - | - | 10 | μA |
| Transient Thermal Resistance | ΔV_F | $I_{FM}=100A$ | - | - | 140 | mV |
| Reverse Leakage Current Under High Temperature | H_{IR} | $T_a=200^\circ C, V_R=V_{RM}$ | - | - | 2.5 | mA |
| Temperature Resistance | R_{th} | DC total junction to case | - | - | 1.0 | °C/W |