

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

- Average Forward Current : $I_O=35A$.
- Zener Voltage : 23V(Typ.)

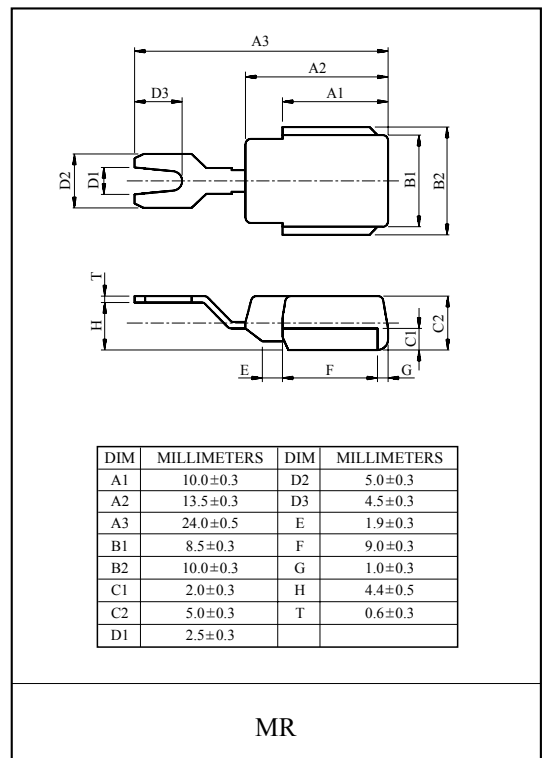
POLARITY

E35A23VS E35A23VR

(+ Type) (- 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} | 450 (50Hz) | A |
| Peak Reverse Surge Current ($I_{RSM}/2=10ms$) | I_{RSM} | 70 | A |
| Peak Reverse Over Voltage | V_{RSM} | 70 | V |
| Peak Reverse Voltage | V_{RM} | 17 | V |
| Junction Temperature | T_j | -40 ~ 200 | °C |
| Storage Temperature Range | T_{stg} | -40 ~ 150 | °C |



ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--|------------|---|------|------|------|-------|
| Peak Forward Voltage | V_{FM} | $I_{FM}=100A$ | - | - | 1.05 | V |
| Zener Voltage | V_Z | $I_Z=10mA$ | 20 | 23 | 26 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_R=V_{RM}$ | - | - | 10 | μA |
| Transient Thermal Resistance | I_{RRM} | $I_{FM}=100A, Pw=100mS$ | - | - | 90 | mV |
| Reverse Leakage Current Under High Temperature | H_{IR} | $T_a=150°C, V_R=V_{RM}$ | - | - | 2.5 | mA |
| Reverse recovery Time | T_{rr} | $I_F=100mA, -I_R=100mA$ 90% Recovery Point | - | - | 5.0 | μS |
| Temperature Resistance | R_{th} | DC total junction to case | - | - | 1.0 | °C/W |
| Thermal runaway Temperature | $Trwy$ | $V_R=17V, I_R=5mA$ | 200 | - | - | °C |
| Temperature Coefficient | α_T | $I_R=10mA$ | - | 18 | - | mV/°C |