

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

### FEATURES

- Average Forward Current :  $I_0=30A$ .
- Zener Voltage : 23V(Typ.)

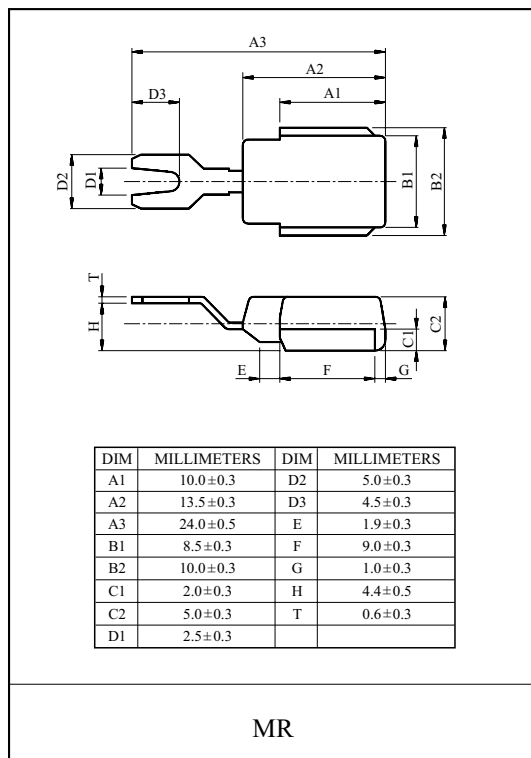
### POLARITY

E30A23VS E30A23VR

(+ Type) (- Type)

### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Average Forward Current	$I_{F(AV)}$	30	A
Peak 1 Cycle Surge Current	$I_{FSM}$	300(50Hz)	A
Repetitive Peak Reverse Surge Current	$I_{RSM}$	30	A
Transient Peak Reverse Voltage	$V_{RSM}$	17	V
Peak Reverse Voltage	$V_{RM}$	17	V
Junction Temperature	$T_j$	-40 ~ 190	°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	$V_{FM}$	$I_{FM}=100A$	-	-	1.2	V
Zener Voltage	$V_Z$	$I_Z=10mA$	21	23	25	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_R=V_{RM}$	-	-	10	μA
Transient Thermal Resistance	$\Delta V_F$	$I_{FM}=100A$	-	-	100	mV
Reverse Leakage Current Under High Temperature	HIR	$T_a=150\text{ }^\circ\text{C}$ , $V_R=V_{RM}$	-	-	2.5	mA
Reverse Recovery Time	$t_{rr}$	$I_F=100mA$ , $-I_R=100mA$ , 90% Recovery Point	-	-	1.5	μs
Temperature Resistance	$R_{th}$	DC total junction to case	-	-	1.0	°C/W

# E30A23VS, E30A23VR

