

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

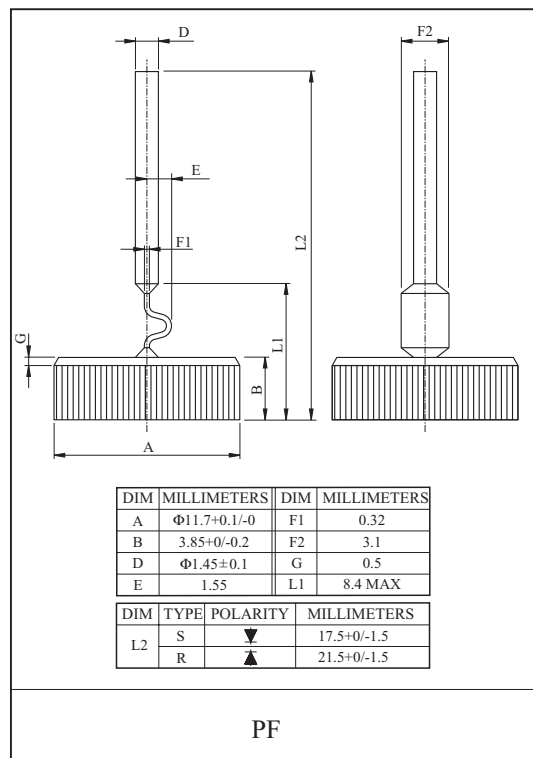
- Average Forward Current : $I_O=30A$.
- Zener Voltage : 37V(Typ.)

POLARITY

E30A37VPS E30A37VPR
(+ Type) (- Type)

MAXIMUM RATING ($T_a=25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 ~ 200	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

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	HI_R	$T_a=200^\circ\text{C}$, $V_R=V_{RM}$	-	-	2.5	mA
Temperature Resistance	R_{th}	DC total junction to case	-	-	1.0	$^\circ\text{C/W}$