

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

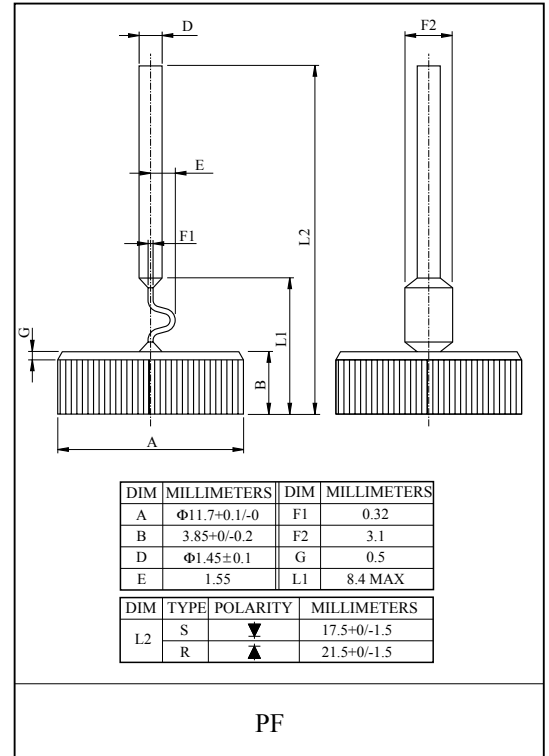
- Average Forward Current : $I_O=30A$.
- Reverse Voltage : 200V(Min.)

POLARITY

- E30A2CPS (+ Type)
- E30A2CPR (- Type)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Non-Repetitive Peak Reverse Voltage	P_{RM}	1.35 (Pulse duration $30\mu S$ Non-repetitive)	kW
Average Forward Current	$I_{F(AV)}$	30	A
Peak 1 Cycle Surge Current	I_{FSM}	350 (10mS Condition Half sine wave 1 cycle)	A
Junction Temperature	T_j	-40 ~ 200	$^\circ C$
Storage Temperature Range	T_{stg}	-40 ~ 200	$^\circ C$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM}=100A$	-	-	1.17	V
Reverse Voltage	V_{RM}	$I_R=5mA$	200	-	-	V
Repetitive Peak Reverse Current	I_{RRM}	$V_R=200V$	-	-	50	μA
Reverse Recovery Time	t_{rr}	$I_F=-I_R$ 100mA	-	-	15	μS
Transient Thermal Resistance	ΔV_F	$I_{FM}=100A$, $I_m=100mA$, $P_t=100mS$	-	-	140	mV
Reverse Leakage Current Under High Temperature	H_{IR}	$T_a=150^\circ C$, $V_R=V_{RM}$	-	-	2.5	mA
Temperature Resistance	R_{th}	Junction to Case	-	0.86	0.86	$^\circ C/W$
		Junction to Fin	-	1.07	1.07	