E50A21VBS, E50A21VBR

STACK SILICON DIFFUSED DIODE

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

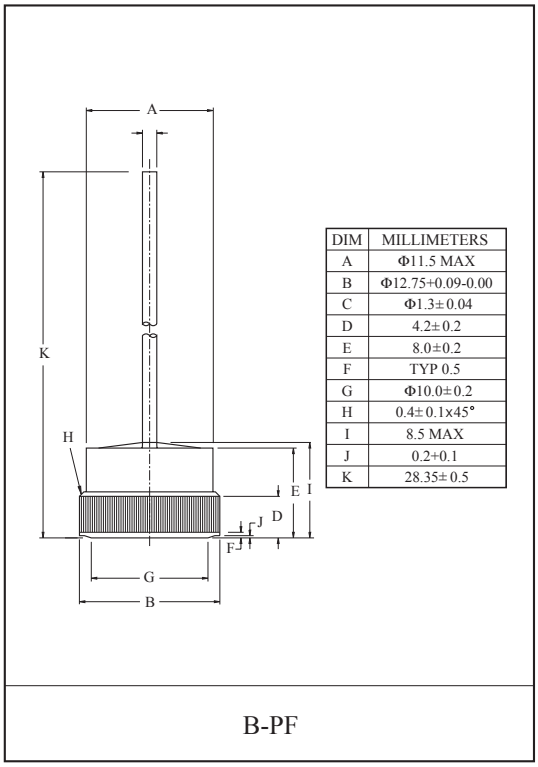
· Average Forward Current : I_O=50A.

· Zener Voltage : 21V(Typ.)

POLARITY

E50A21VBS (+ Type)

E50A21VBR (- Type)



DIM	MILLIMETERS
A	Φ11.5 MAX
B	Φ12.75+0.09-0.00
C	Φ1.3± 0.04
D	4.2± 0.2
E	8.0±0.2
F	TYP 0.5
G	Φ10.0± 0.2
H	0.4± 0.1x45°
I	8.5 MAX
J	0.2+0.1
K	28.35± 0.5

B-PF

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Average Forward Current	$I_{F(AV)}$	50	A
Peak 1 Cycle Surge Current	I_{FSM}	380 (60Hz)	A
Non-Repetitive Peak Reverse Surge Current (10mS)	I_{RSM}	55	A
Transient Peak Reverse Voltage	V_{RSM}	19	V
Peak Reverse Voltage	V_{RM}	16	V
Junction Temperature	T_j	-40～215	℃
Storage Temperature Range	T_{stg}	-40～215	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	I_{FM}=100A	-	-	1.05	V
Zener Voltage	V_Z	I_Z=10mA	19	21	23	V
Reverse Current	I_R	V_R=18V	-	-	0.3	μA
Transient Thermal Resistance	ΔV_F	I_{FM}=100A, I_M=100mA, Pw=100mS	-	-	60	mV
Breakdown Voltage	V_{br}	I_{rsm}=55A, Pw=10mS	-	-	32	V
Temperature Coefficient	α_T	I_Z=10mA	-	15.7	-	mV/℃
Reverse Leakage Current Under High Temperature	HI_R	Ta=150℃, V_R=18V	-	-	100	μA
Temperature Resistance	R_{th}	DC total junction to case	-	-	0.6	℃/W