BAV21W

HIGH VOLTAGE SWITCHING DIODE

1. FEATURES

We declare that the material of product compliance with RoHS requirements and Halogen Free.

SOD-123

2. DEVICE MARKING AND ORDERING INFORMATION

Marking: T3

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	VR	250	V
Peak Forward Current	IF	200	mA
Peak Forward Surge Current	IFM(surge)	625	mA
Non-Repetitive Peak Forward Current tp=10ms	IFSM	3.5	A

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation FR– 5 Board, (Note 1) TA = 25°C Derate above 25°C	PD	 250 2	 mW mW/℃
Thermal resistance from junction to ambient	RθJA	500	℃/W
Junction and Storage Temperature	TJ , Tstg	-55~+150	℃

1.FR–5 Minimum Pad

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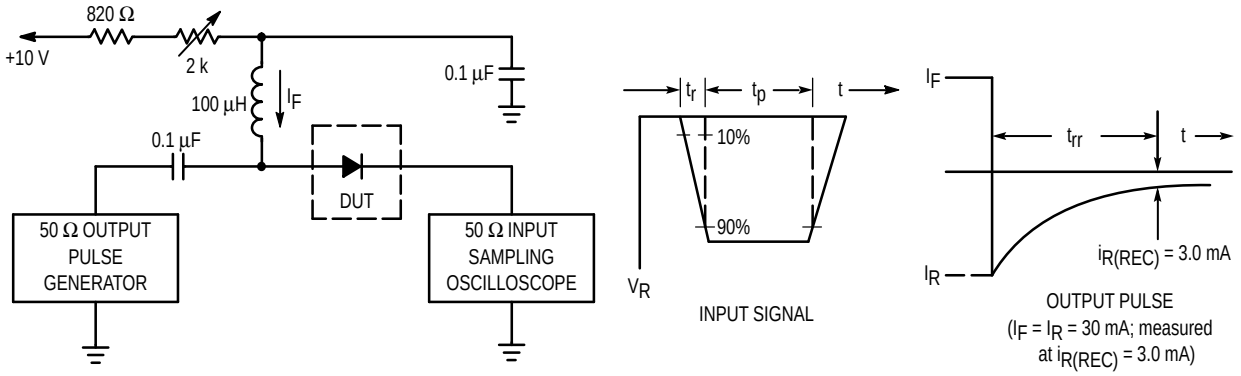
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage Leakage Current (VR=200V) (VR=200V,Tj=150℃)	IR	- -	- -	0.1 100	μA
Reverse Breakdown Voltage (IBR=100μA)	VBR	250	-	-	V
Forward Voltage (IF=100mA) (IF=200mA)	VF	- -	- -	1.0 1.25	V
Diode Capacitance (VR =0V, f=1.0MHz)	CD	-	-	5	pF
Reverse Recovery Time (IF =IR =30mA, RL =100Ω)	trr	-	-	50	ns



Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 30 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 30 mA.
3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

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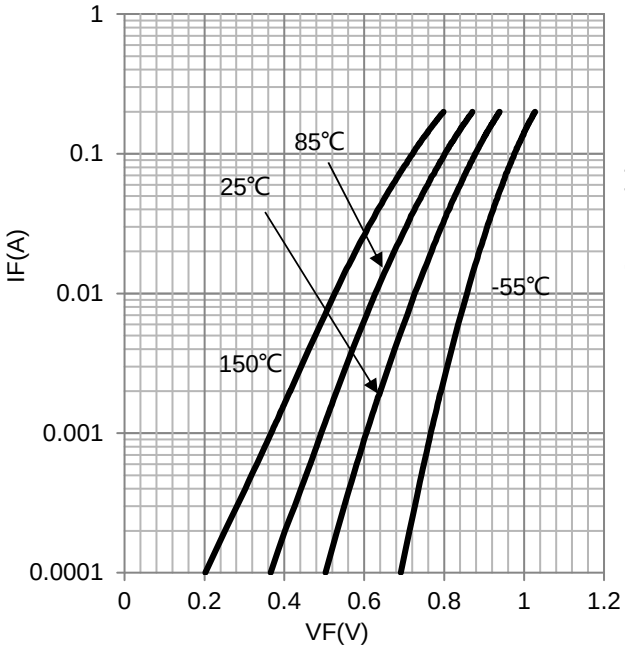
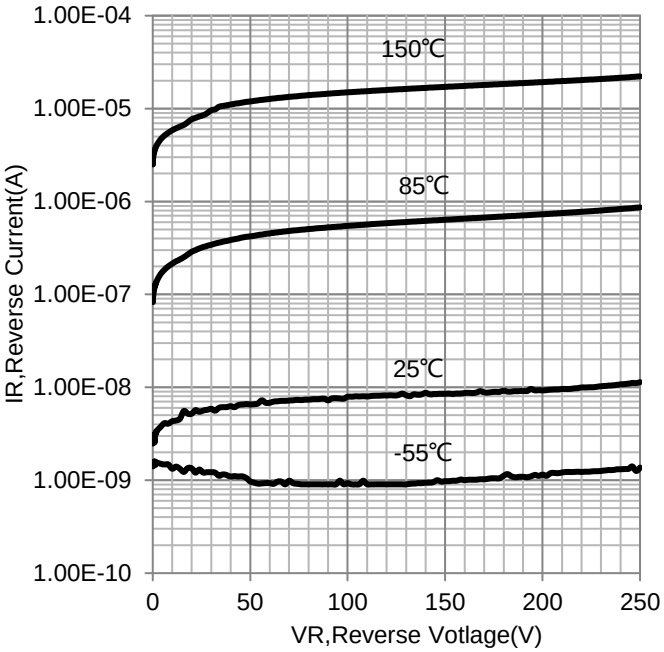
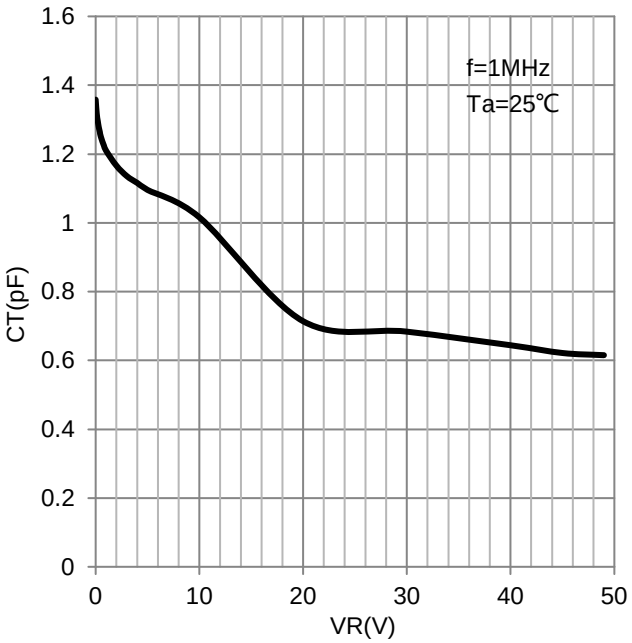
6.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF



IR vs. VR



CT vs. VR

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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

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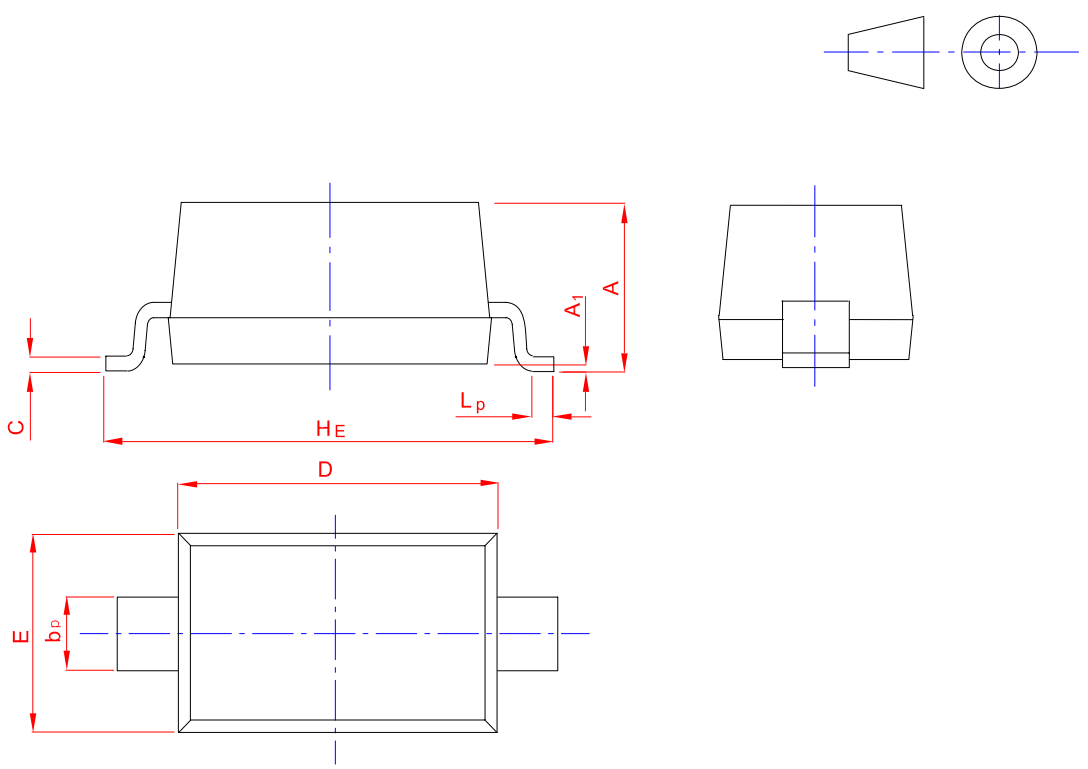

UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20

Pad Layout **Unit: inch(mm)**