















**ESD** 

**TVS** 

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

Domestic Part Number	EVBAV170-S1
Overseas Part Number	BAV170
▶ Equivalent Part Number	BAV170

"S1" means SOT-23





## Plastic-Encapsulate Diodes

#### **FEATURES**

- Low Leakage Current
- High Switching Speed

#### **APPLICATION**

Low-leakage Current Applications
in Surface Mounted Circuits



**MARKING:JX** 



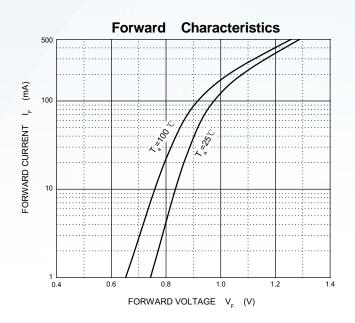
#### MAXIMUM RATINGS ( T<sub>a</sub>=25℃ unless otherwise noted )

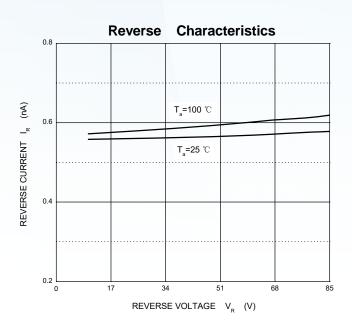
Symbol	Parameter	Value	Unit		
$V_{RRM}$	Repetitive Peak Reverse Voltage	85	V		
<b>V</b> <sub>R</sub>	DC Blocking Voltage	75	V		
1	Forward Current(single diode)	215	mA		
IF	Forward Current(double diode )	125	IIIA		
I <sub>FRM</sub>	Repetitive Peak Forward Current	500	mA		
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current@ t =8.3ms	1.0	А		
P <sub>D</sub>	Power Dissipation	250	mW		
R <sub>OJA</sub>	Thermal Resistance from Junction to Ambient	500	°C/W		
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}$		

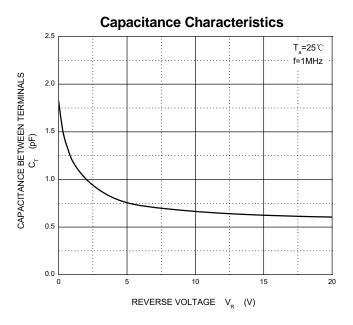
### **ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25°Cunless otherwise specified)**

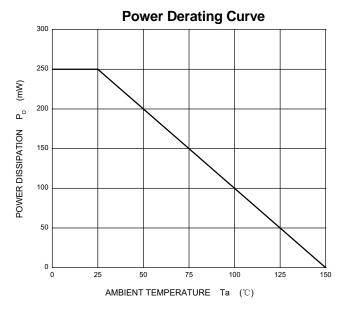
Parameter	Symbol	Test conditions	Min	Тур	Max	Unit	
Reverse voltage	$V_{(BR)}$	I <sub>R</sub> =100μA	75			V	
Reverse current IR VR=75V		V <sub>R</sub> =75V			5	nA	
Forward voltage	VF	I <sub>F</sub> =1mA			0.9	V	
		I==10mA			1		
		I <sub>F</sub> =50mA			1.1		
		I <sub>F</sub> =150mA			1.25		
Total capacitance	$C_{tot}$	V <sub>R</sub> =0,f=1MHz		2		pF	
Reverse recovery time	t <sub>rr</sub>	$I_F = I_R = 10 \text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$			3	μs	



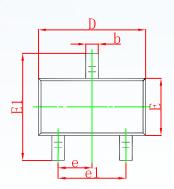


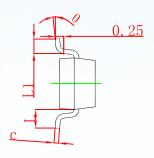


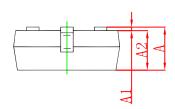












Symbol	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
E	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950	TYP	0.037 TYP		
e1	1.800	2.000	0.071	0.079	
L	0.550 REF		0.022 REF		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	



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