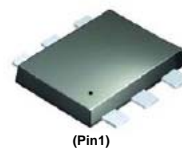


BAS70SV

70V Dual Schottky Barrier Diodes

Features

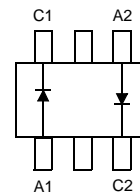
- Low Forward Voltage Drop
- Low Capacitance
- Low Leakage Current
- Fast Switching
- Ultra Small Surface Mount Package
- Lead Free By Design / RoHS Compliant
- Green Compound
- 0.6mm Max Package Height



(Pin1)

SOT-563F

BAS70SV Marking : AD



ELECTRICAL SYMBOL

Note : Pinouts are symmetrical. Pin 1 & 4 are interchangeable.
The placement of the device in the carrier tape can be of either orientation.

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	70	V
$I_{F(AV)}$	Average Rectified Forward Current	70	mA
I_{FSM}	Forward Surge Current (8.3mS Single Half Sine Wave)	2.5	A
P_D	Power Dissipation	200	mW
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient *	625	$^\circ\text{C/W}$

* Device mounted on board compliant to JESD51-2 and JESD51-3 standards.

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_R	Breakdown Voltage	$I_R = 100\mu\text{A}$	70	93		V
I_R	Reverse Current	$V_R = 50\text{V}$ $V_R = 70\text{V}$		0.02	0.1 2.5	μA μA
V_F	Forward Voltage	$I_F = 1\text{mA}$ $I_F = 15\text{mA}$		365 855	410 1000	mV mV
T_{rr}	Reverse Recovery Time	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1I_R$		1.55	8	nS
Cap	Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$		1.62	3	pF

Typical Performance Characteristics

Figure 1. Forward Current Characteristics

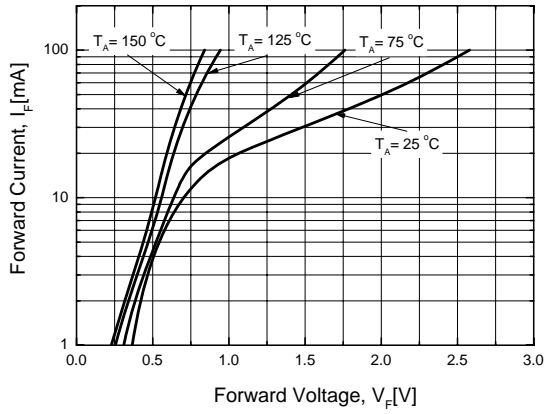


Figure 2. Reverse Leakage Current

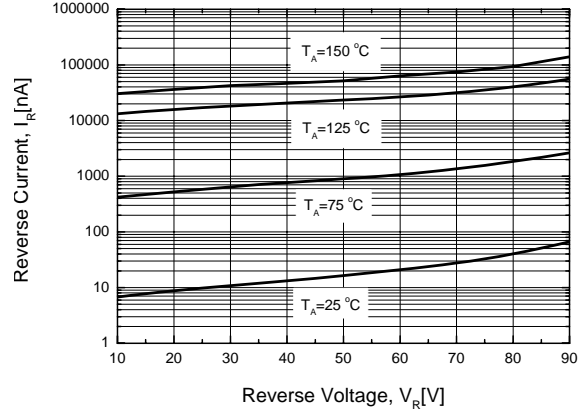
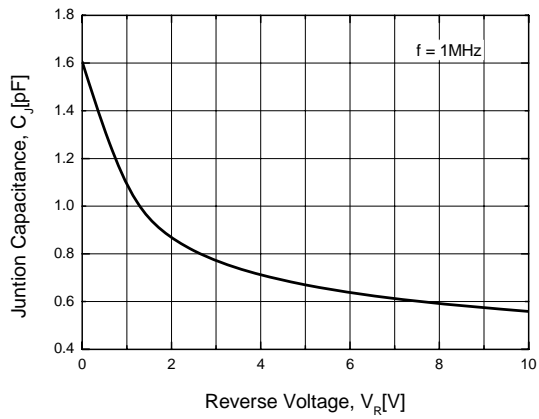
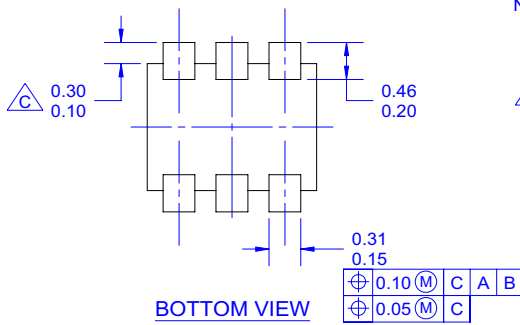
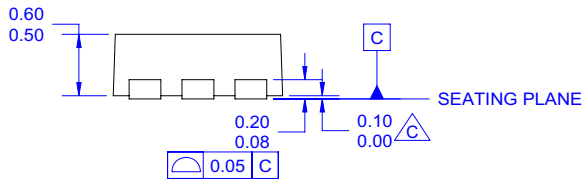
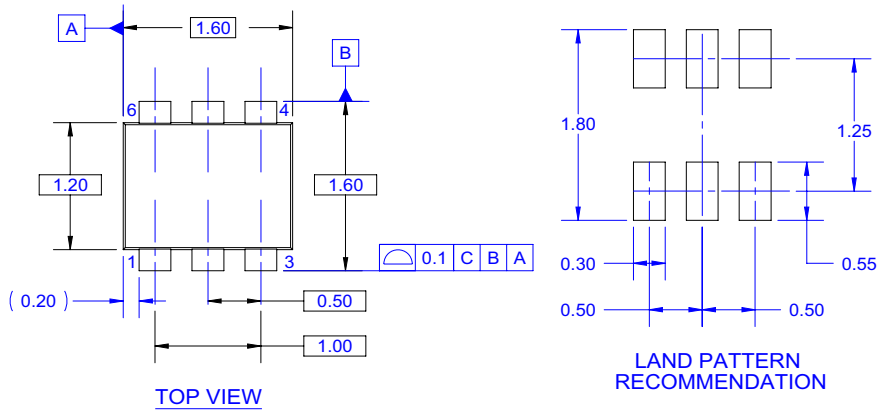


Figure 3. Junction Capacitance



Physical Dimension

SOT-563F



NOTES: UNLESS OTHERWISE SPECIFIED.






- A. REFERENCE TO JEDEC MO293.
- B. ALL DIMENSIONS ARE IN MILLIMETERS.
- △ DOES NOT COMPLY JEDEC STANDARD VALUE.
- D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSION.
- E. DIMENSION AND TOLERANCE AS PER ASME Y14.5-1994.
- F. DRAWING FILE NAME: MAD06A REV2

Dimensions in Millimeters



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DEUXPEED®	MegaBuck™	Saving our world, 1mW/W/kW at a time™	TinyPWM™
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