

SOT-363 Fast Switching Diodes

Features

- $V_R=100V$
- $I_{F(AV)}=200mA$
- Extremely Fast Switching Speed
- Surface mount package ideally suited for automatic insertion
- High Conductance

Applications

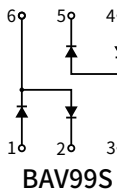
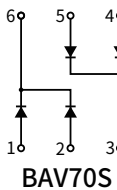
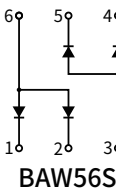
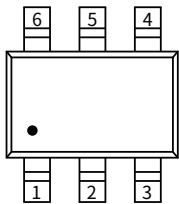
- For General Purpose Switching Applications

Mechanical Data

- Case: SOT-363
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026

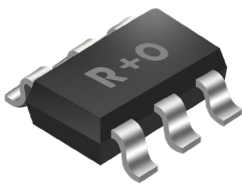
Function Diagram

Marking:
BAW56S:B5H
BAV70S:B7H
BAV99S:B9H



Reverse Voltage
100 V
Forward Current
0.2 Ampere

SOT-363



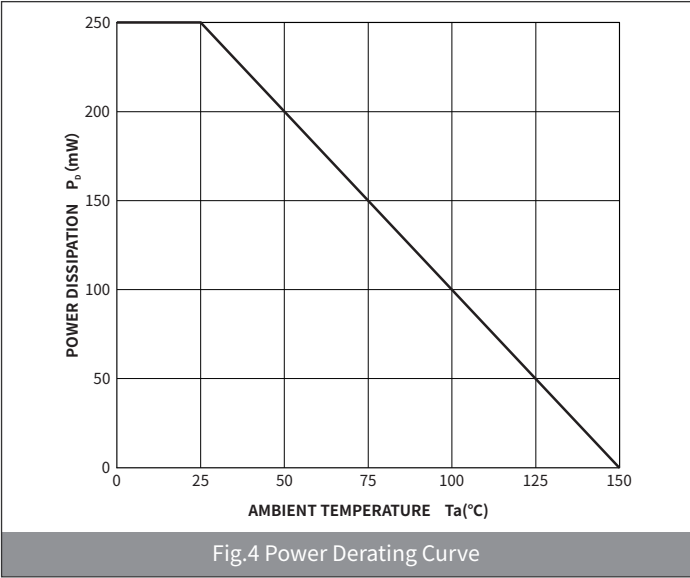
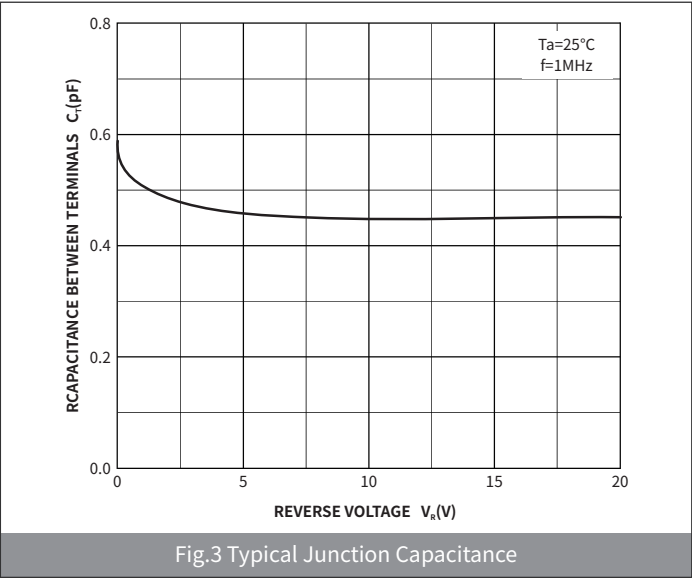
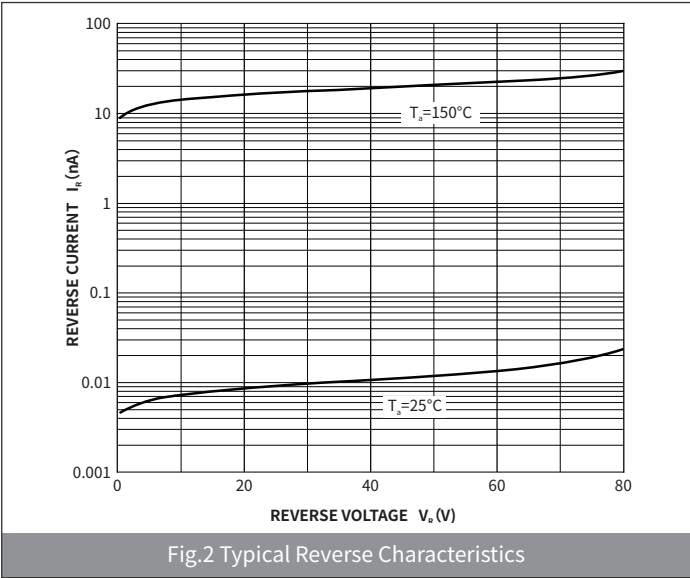
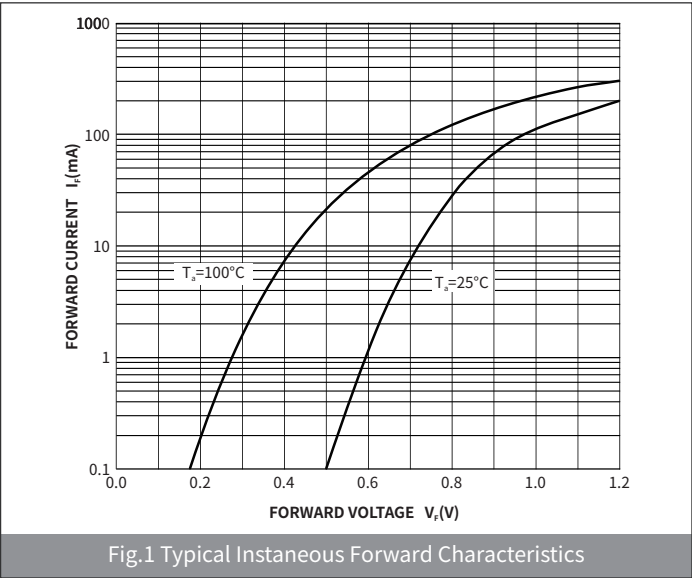
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Reverse Voltage	V_R	V	100
Maximum Average Forward Rectified Current	$I_{F(AV)}$	mA	200
Non-Repetitive Peak forward surge current @ $t_p=1.0ms$	I_{FSM}	A	1.0
Power Dissipation	P_d	mW	250
Storage temperature	T_{stg}	°C	-55 ~+150
Junction temperature	T_j	°C	-55 ~+150
Typical thermal resistance	$R_{\theta J-A}$	°C /W	625

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	Min	Type	Max
Reverse Breakdown voltage	$I_R=100\mu A$	$V_{(BR)R}$	V	100	—	—
Maximum instantaneous forward voltage	$I_F=1.0mA$	V_F	V	—	—	0.715
	$I_F=10mA$			—	—	0.855
	$I_F=50mA$			—	—	1.0
	$I_F=150mA$			—	—	1.25
Reverse Leakage Current	$V_R=80V$	I_R	μA	—	—	0.5
Total capacitance	$V_R=0V, f=1MHz$	C_T	pF	—	—	1.5
Maximum reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1\times I_R, R_L=100\Omega$	T_{rr}	ns	—	—	4.0

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



● Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOT-363	R1	0.008	3000	24000	120000	7"

● Package Outline Dimensions (SOT-363)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.9	1.10	0.035	0.043
A1	-	0.10	-	0.004
A2	0.80	1.00	0.0315	0.039
b	0.15	0.35	0.006	0.014
D	1.80	2.20	0.071	0.087
E	1.15	1.35	0.045	0.053
E1	2.00	2.40	0.079	0.094
F	0.10	0.25	0.004	0.010
e	0.650TYP		0.026TYP	
e1	1.20	1.40	0.047	0.055
L	0.525REF		0.021REF	
L1	0.32REF		0.0126REF	
θ	-	8°	-	8°

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
G	-	0.65	-	0.025
H	-	1.94	-	0.076
X	0.40	-	0.016	-
Y	0.80	-	0.031	-