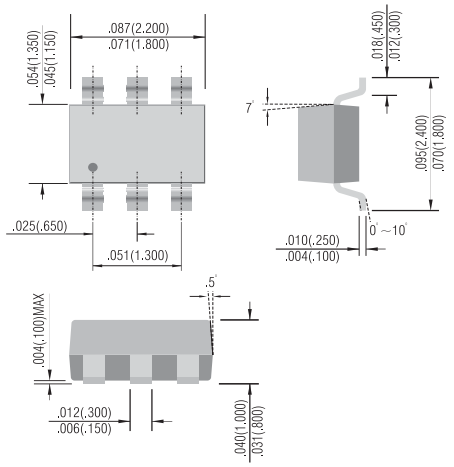
BAV99S

VOLTAGE 85 Volts **CURRENT** 200 mA

HIGH SPEED SWITCHING DIODE ARRAY

This device comes with two pairs of high speed switching diodes connected in series, where both pairs are electrically isolated, offering a very low capacitance, minmizing the insertion losses in data transmission lines.

SOT-363 Unit: inch (mm)



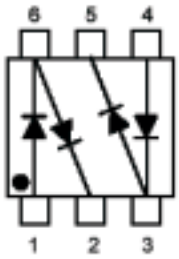
FEATURES

- Maximum capacitance of 1.5pF
- Maximum leakage current of 2.5 µA
- Reverse breakdown voltage of 70V
- Rail to rail ESD protection
- Overshoot and undershoot switching control
- Mobile phones and accessories
- Video game consoles connector ports
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: SOT-363 molded plastic

Terminals: Lead solderable per MIL-STD-202G, Method 208.



SC70-6L

MAXIMUM RATINGS (PER DIODE) $T_J = 25^oC$, UNLESS OTHERWISE NOTED

Rating	Symbol	Value	Units
Maximum repetitve peak reverse voltage	V_{RRM}	85	V
Continuous reverse voltage	V_R	75	V
Continuous forward voltage	I_F	200	mA
Non-repetitve peak forward current, t=1 µ sec, Tj=25 ^oC square wave	I_{FSM}	4.5	A
Total power dissioation , Tj=85 ^oC	P_{TOT}	250	mW
Operating Junction Temperature range	T_J	-50 to + 150	^oC
Storage temperature range	T_{STG}	-50 to + 150	^oC
Soldering Temperature, t max = 10 secs	T_L	260	^oC

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ELECTRICAL CHARACTERISTICS (PER DIODE) $T_J = 25^oC$, UNLESS OTHERWISE NOTED

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Breakdown voltage	V_{BR}	I_{BR}=100 µA	75			
Forward voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA			715 855 1 1.25	mV mV V V
Reverse leakage current	I_R	V_R=75V			2.5	µ A
Reverse leakage current at Tj=150^oC	I_R	V_R=25V V_R=70V			30 50	µ A
Junction capacitance	C_D	0Vdc Bias, f=1MHz			1.5	pF
Reverse recovery time	t_{rr}	I_F=10mA,I_R=10mA R_L=100 Ohms measured at I $_R$=1mA			4	ns
Forward recovery voltage	V_{fr}	I_F=10mA,tr=20nsec			1.75	V

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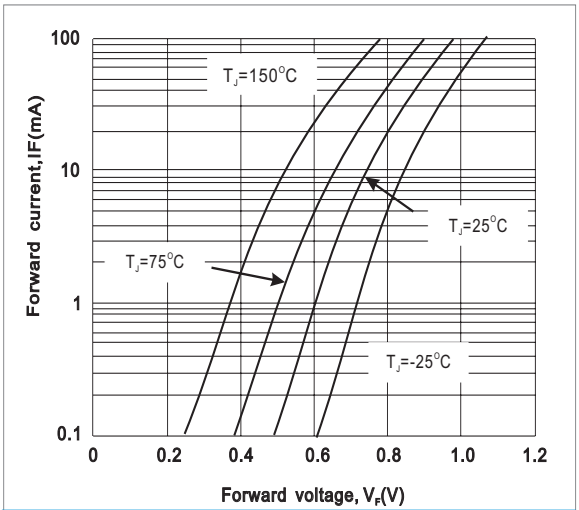

Fig.1-Typical forward voltage

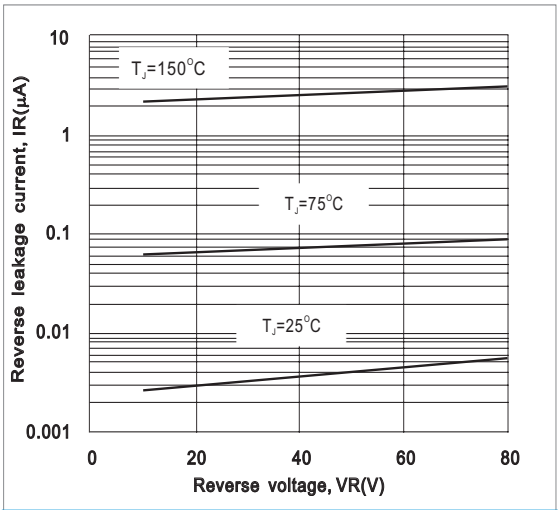

Fig.2-Typical reverse leakage

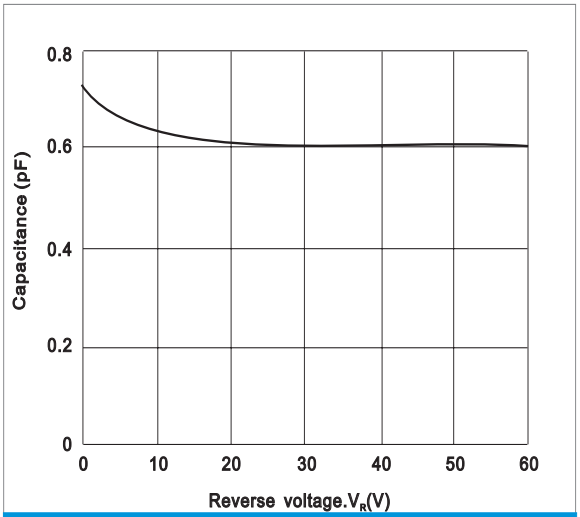

Fig.3-Typical capacitance