

Small Signal Product

250mW High Speed Switching Array

FEATURES

- Fast switching speed
- High reverse breakdown voltage rating
- Moisture sensitivity level 1
- Matte Tin (Sn) lead finish with Nickel (Ni) underplate
- Pb free version and RoHS compliant
- Packing code with suffix "G" means green compound (halogen-free)

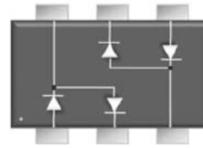


SOT-363



MECHANICAL DATA

- Case: SOT-363 small outline plastic package
- Terminal: Matte tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed : 260°C/10s
- Case material UL flammability rating 94V-0
- Weight: 8 ± 0.5 mg
- Marking Code: K1



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)				
PARAMETER	SYMBOL	VALUE	UNIT	
Power Dissipation	P _D	200	mW	
Repetitive Peak Reverse Voltage	V _R RM	85	V	
Repetitive Peak Forward Current	I _F RM	450	mA	
Mean Forward Current	I _O	150	mA	
Non-Repetitive Peak Forward Surge Current	I _F SM	Pulse width = 1 μs	4.5	A
		Pulse width = 1 s	0.5	
Junction and Storage Temperature Range	T _J , T _{STG}	-55 to 150	°C	

PARAMETER	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage	V _(BR)	75	-	V
Forward Voltage	V _F	I _F =2.5μA	0.715	V
		I _F =1.0mA	0.855	
		I _F =10mA	1.000	
		I _F =50mA	1.200	
		I _F =100mA	1.250	
Reverse Leakage Current	I _R	-	1.000	μA
Junction Capacitance	C _J	-	1.500	pF
Reverse Recovery Time	t _{rr}	-	6.000	ns

Note 1 : Reverse recovery test conditions : I_F=I_R=10mA, R_L=100Ω

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RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Maximum Permissible Continuous Forward Current As A Function of Soldering Point Temperature

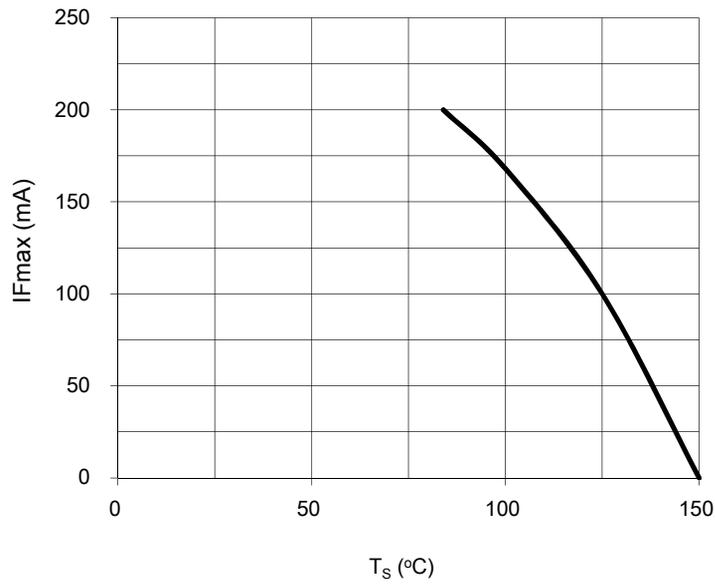


Fig. 2 Forward Current As A Function of Forward Voltage

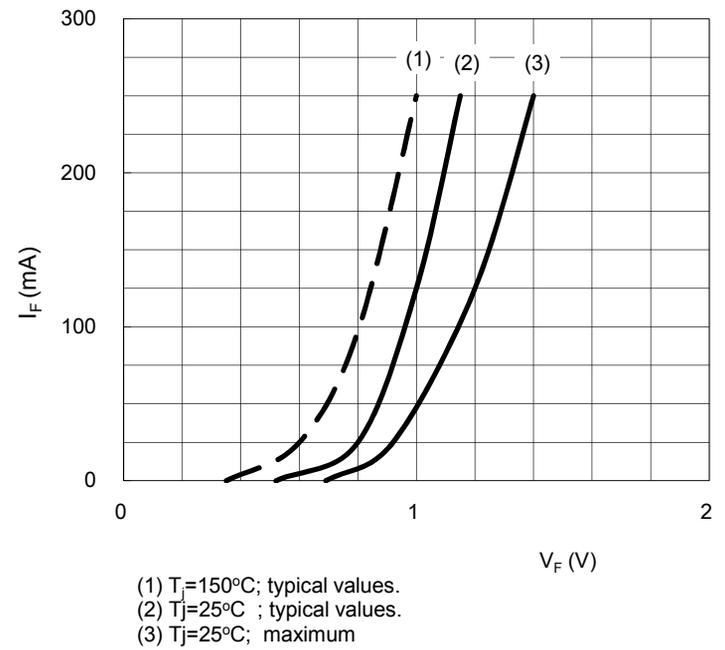
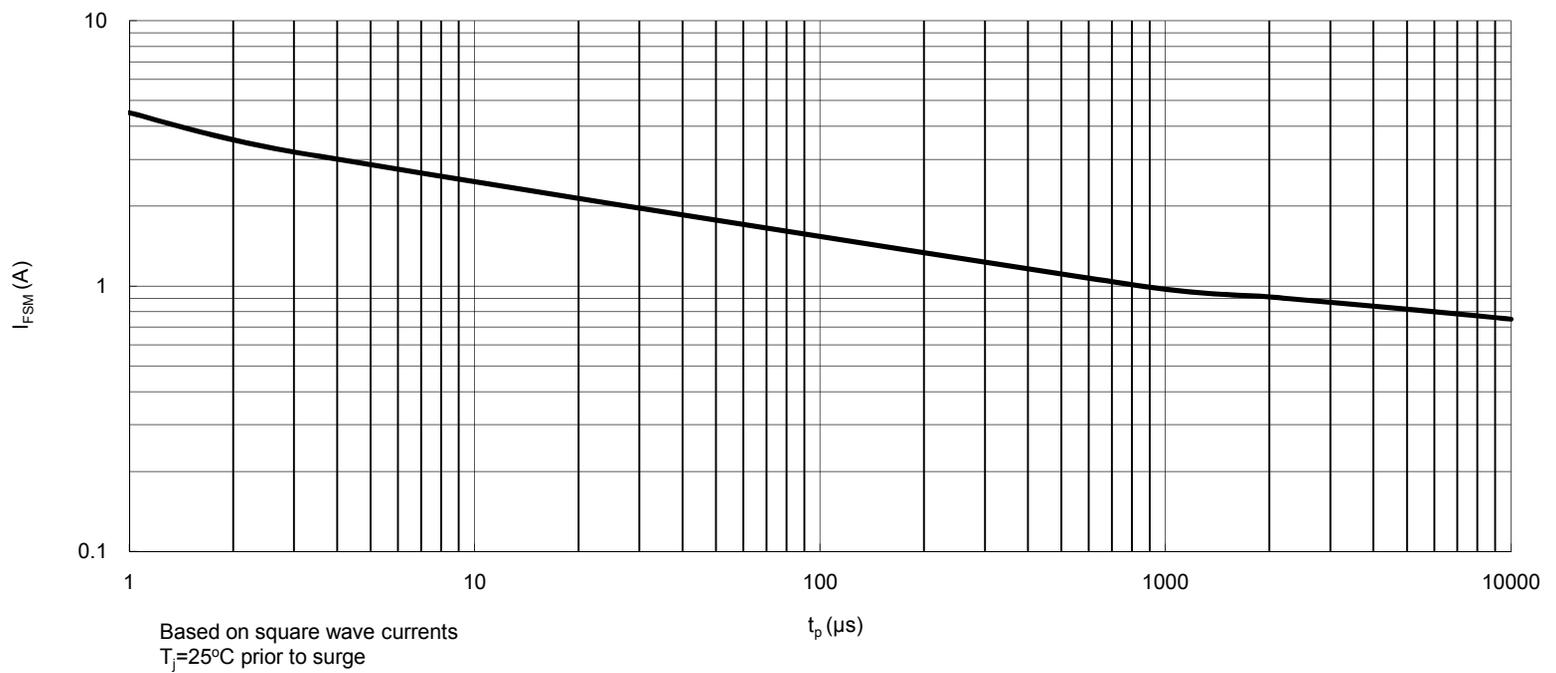


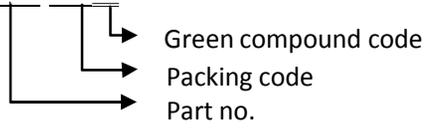
Fig. 3 Maximum Permissible Non-Repetitive Peak Forward Current As A Function of Pulse Duration



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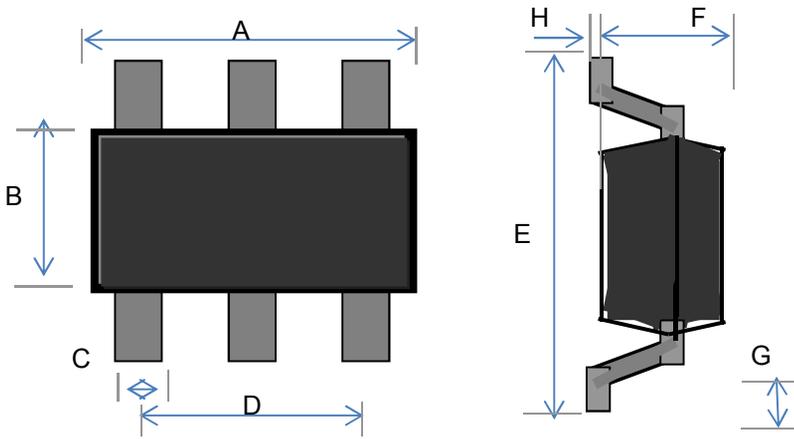
ORDER INFORMATION (EXAMPLE)

BAV99S RFG



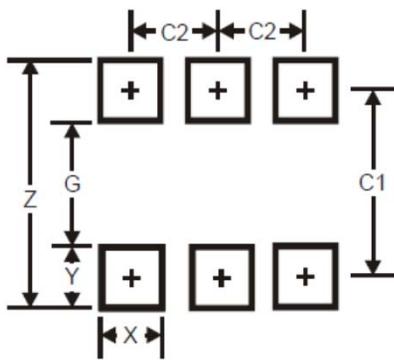
DIMENSIONS

SOT-363



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.00	2.20	0.079	0.087
B	1.15	1.35	0.045	0.053
C	0.15	0.35	0.006	0.014
D	1.20	1.40	0.047	0.055
E	2.15	2.45	0.085	0.096
F	0.85	1.05	0.033	0.041
G	0.25	0.46	0.010	0.018
H	0.00	0.10	0.000	0.004

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
Z	3.20	0.126
G	1.60	0.063
X	0.55	0.022
Y	0.80	0.031
C1	2.40	0.094
C2	0.95	0.037

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