GOOD-ARK
SEMICONDUCTOR

BAV70
Dual Switching Diode

Features

- High Switching Speed: $t_{rr} \leq 4$ ns
- Low Leakage Current
- Small SMD Plastic Packages
- Lead Free By Design

SOT-23

Applications

- High-Speed Switching
- General-Purpose Switching

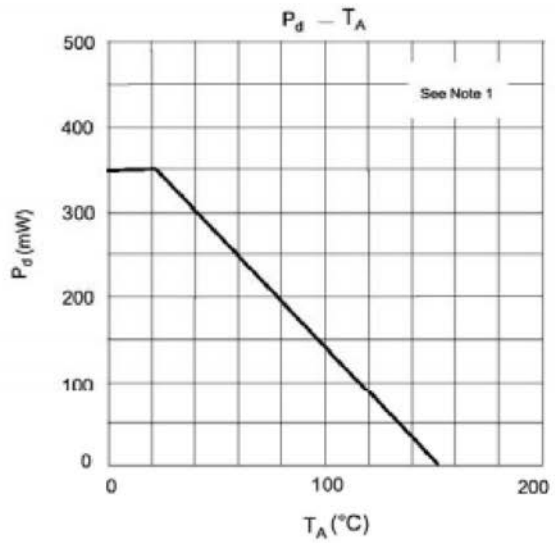
Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

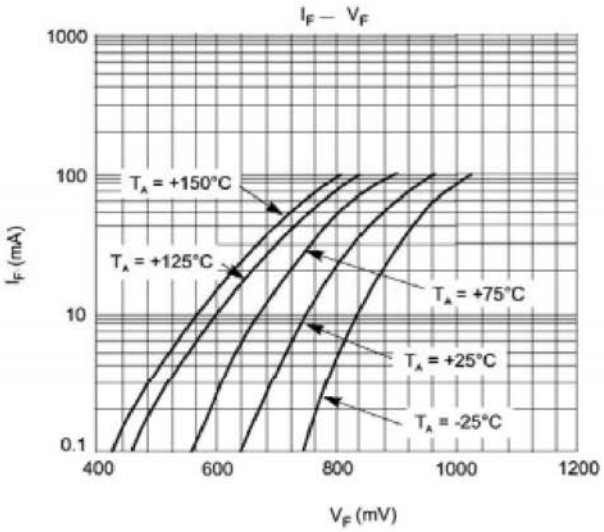
Parameter		Symbol	Value	UNIT
Repetitive Peak Reverse Voltage		V_{RRM}	70	V
Average Forward Current		$I_{F(AV)}$	0.2	A
Non-Repetitive Peak Forward Surge Current	at t=1.0s	I_{FSM}	1	A
	at t=1.0ms		2	
Power Dissipation		P_d	350	mW
Thermal Resistance From Junction to Ambient		$R_{\theta JA}$	357	°C /W
Junction Temperature		T_J	150	°C
Storage Temperature Range		T_J, T_{STG}	-65 to 150	°C

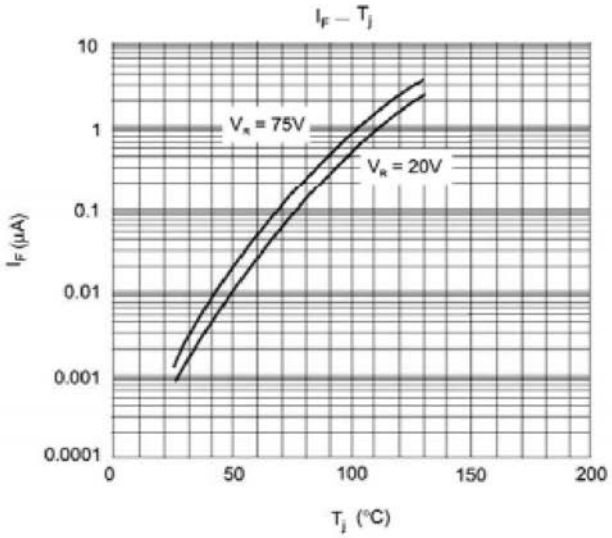
Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	I_R=100uA	75		V
Reverse Voltage Leakage Current	I_R	V_R=70V		5	uA
		V_R=25V, T_A=150°C		60	
		V_R=70V, T_A=150°C		100	
Forward Voltage	V_{FM}	I_F=1.0mA		715	mV
		I_F=10mA		855	
		I_F=50mA		1	V
		I_F=150mA		1.25	
Diode Capacitance	C_T	V_R=0V, f=1MHz		1.5	pF
Reverse Recovery Time	T_{RR}	I_F=I_R=10mA, I_{RR}=1.0mA.R_L=100Ω		6	nS

Typical Electrical Characteristic Curves







Package Outline Dimensions

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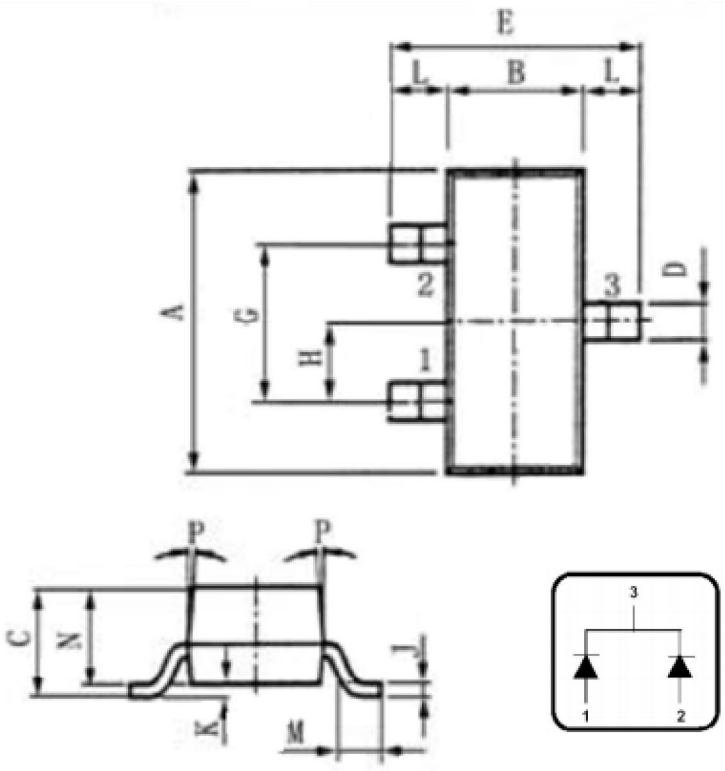

(In mm)

	SOT- 23
A	2.9±0.02
B	1.30+0.20/-0.15
C	1.30MAX
D	0.40+0.15/-0.05
E	2.40+0.30/-0.20
G	1.9±0.2
H	0.95±0.1
J	0.10+0.10/-0.05
K	0.00-0.10
L	0.55±0.1
M	0.2MIN
N	1.00+0.20/-0.10
P	7"