

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV

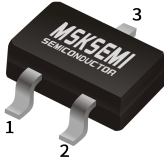


GDT



PLED

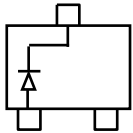
Product data sheet



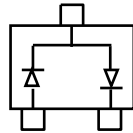
**SOT-23**

**FEATURES**

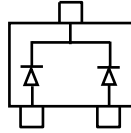
- Low turn-on voltage
- Fast switching
- Also available in lead free version



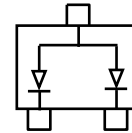
BAS70 Marking: 73



BAS70-04 Marking: 74







BAS70-05 Marking: 75



BAS70-06 Marking: 76

**MARKING:**

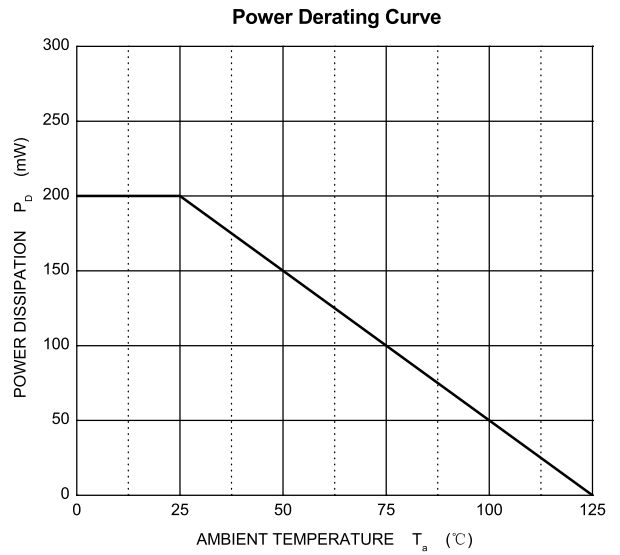
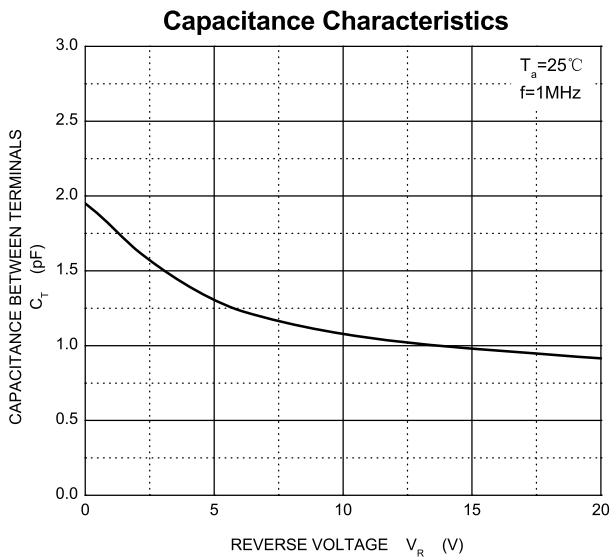
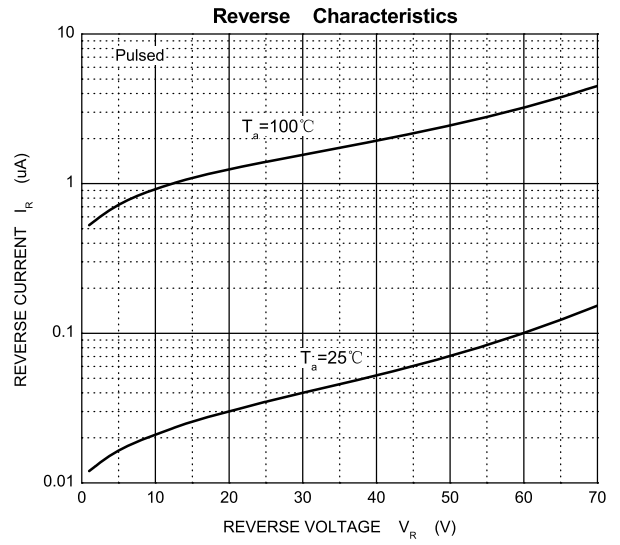
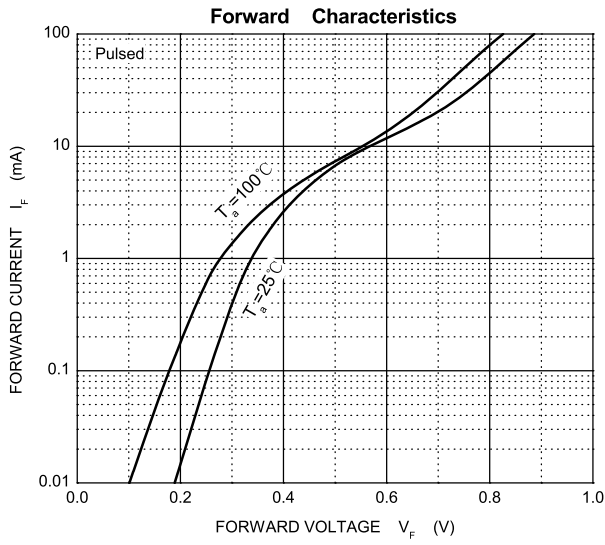
BAS70	BAS70-04	BAS70-05	BAS70-06
			

**MAXIMUM RATINGS @T<sub>a</sub>=25°C**

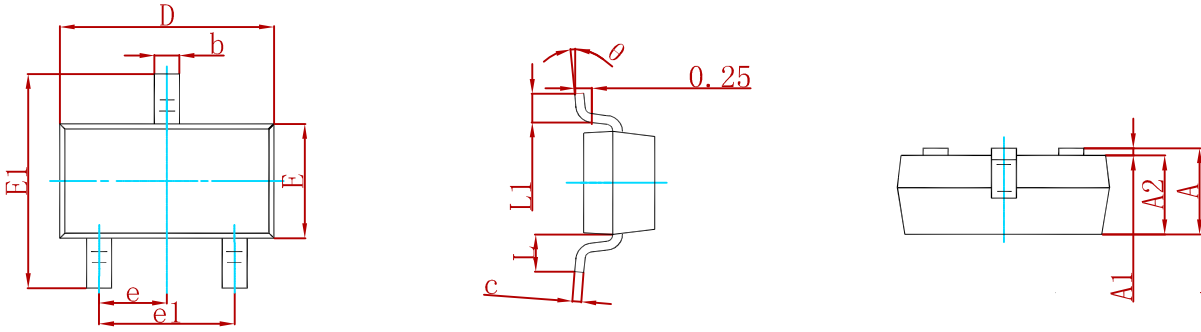
Symbol	Parameter	Value	Unit
V <sub>R</sub>	DC Voltage	70	V
I <sub>F</sub>	Forward Continuous Current	70	mA
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	100	mA
P <sub>D</sub>	Power Dissipation	200	mW
R <sub>θJA</sub>	Thermal Resistance Junction to Ambient	500	°C/W
T <sub>J</sub>	Operating Junction Temperature Range	-40 ~ +125	°C
T <sub>stg</sub>	Storage Temperature Range	-55 ~ +150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V <sub>(BR)</sub>	I <sub>R</sub> = 10μA	70		V
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> =50V		100	nA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1mA I <sub>F</sub> =15mA		410 1000	mV
Diode capacitance	C <sub>D</sub>	V <sub>R</sub> =0V f=1MHz		2	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>tr</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω		5	ns

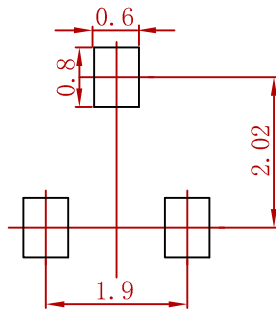


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

**Suggested Pad Layout**



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance: ± 0.05mm.
  3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAS70/-04/-05/-06	SOT-23	3000

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