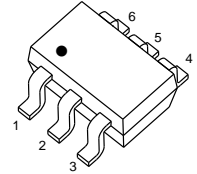
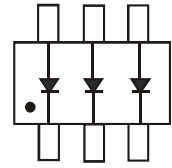




BAS21TW SURFACE MOUNT FAST SWITCHING DIODE ARRAY

Features

- Fast Switching Speed: max. 50ns
- Continuous Reverse Voltage: max. 200V
- Repetitive Peak Reverse Voltage: max. 250V
- Repetitive Peak Forward Current: max. 1A
- Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance



Marking : XJK

SOT-363

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	250	V
Peak Repetitive Reverse Voltage	V _{R(RM)}	250	V
Working Peak Reverse Voltage	V _{R(WM)}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	177	V
Forward Continuous Current (Note 5)	I _{FM}	200	mA
Non-Repetitive Peak Forward Surge Current	I _{FSM}	@ t = 50μs	10
		@ t = 100μs	8
		@ t = 10ms	2

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P _D	300	mW
Thermal Resistance Junction to Ambient Air (Note 5)	R _{θJA}	417	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	250	—	V	I _R = 100μA
Forward Voltage	V _F	—	1.05	V	I _F = 100mA
			1.25		I _F = 200mA
Reverse Current (Note 6)	I _R	—	100	nA	V _R = 200V
			100	μA	V _R = 200V, T _J = +150°C
Total Capacitance	C _T	—	5	pF	V _R = 6, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	50	ns	V _R = 6V, I _F = 5mA

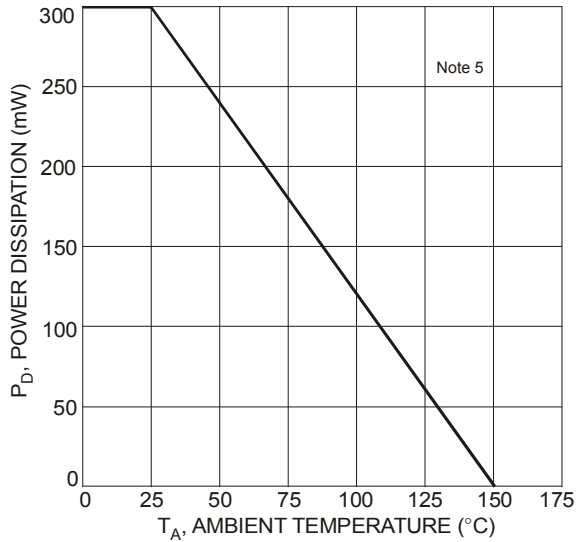


Figure 1 Power Derating Curve, Total Package

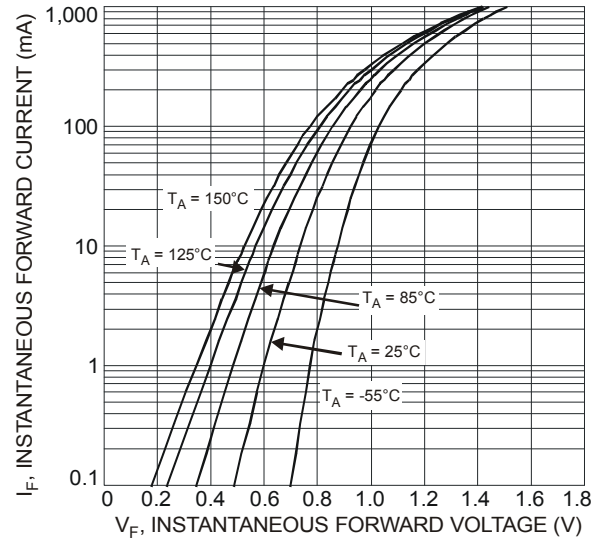


Figure 2 Typical Forward Characteristics, Per Element

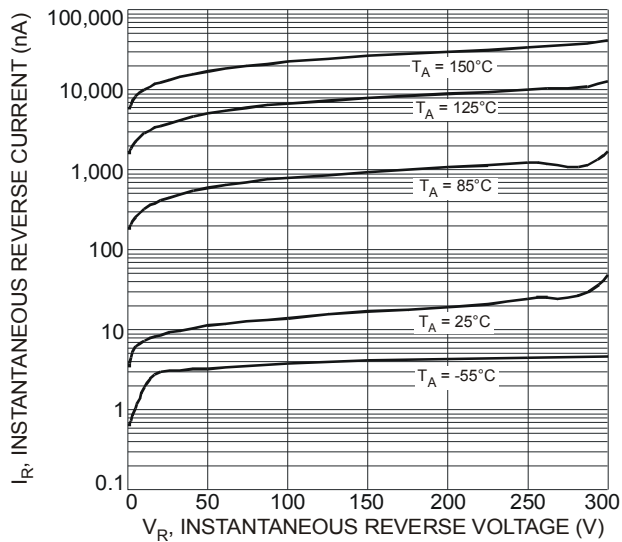


Figure 3 Typical Reverse Characteristics, Per Element

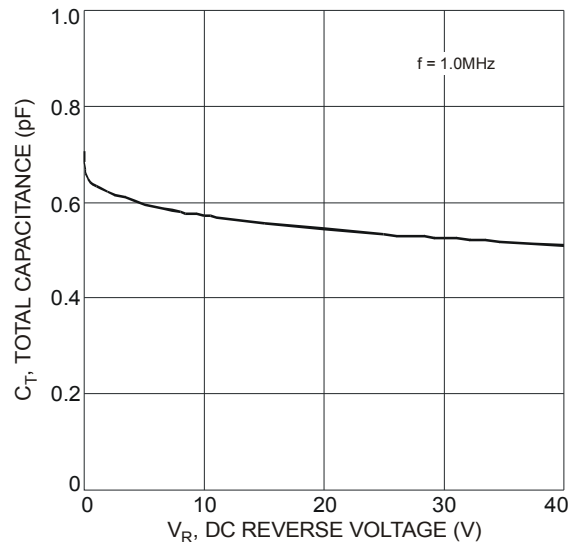
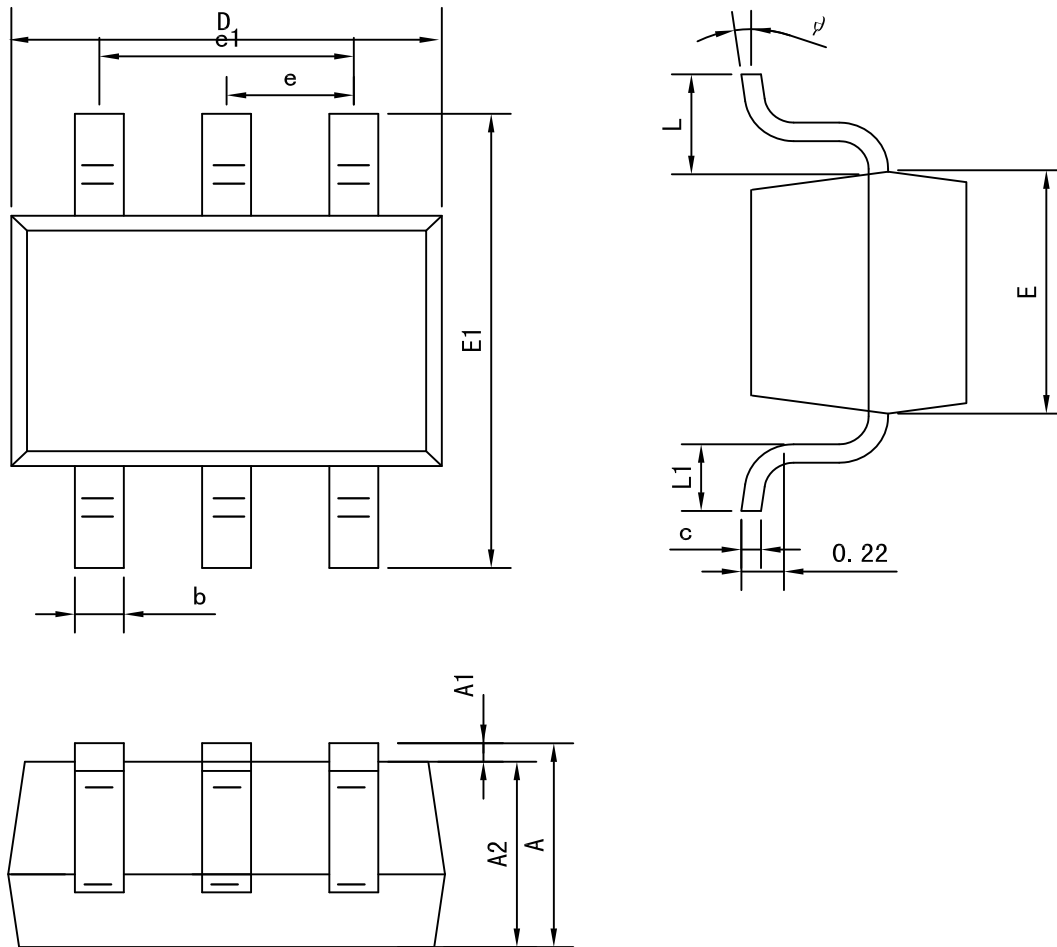


Figure 4 Total Capacitance vs. Reverse Voltage, Per Element



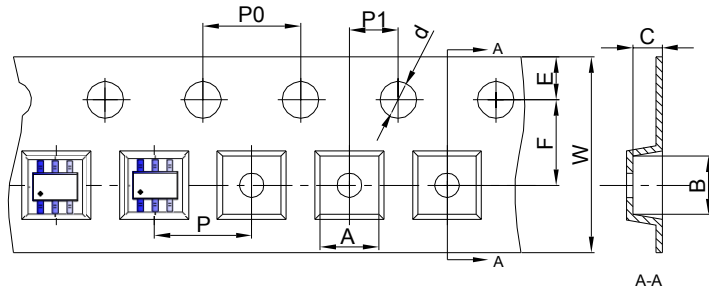
SOT-363 Package outline dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°



SOT-363 Embossed Carrier Tape



Packaging Description:

SOT-363 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-363 Tape Leader and Trailer

