



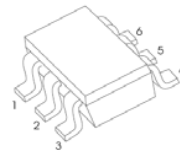
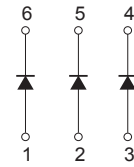
Plastic-Encapsulate Diodes

PRIMARY CHARACTERISTICS

P_d	200mW
V_{RRM}	75V
I_F	300mA
$V_F@I_F=1mA$	0.715V
$T_{J,Max}$	150°C

SCHEMATIC DIAGRAM

SOT-363 PACKAGE



SOT-363

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

MECHANICAL DATA

- Case : Molded plastic,SOT-363
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

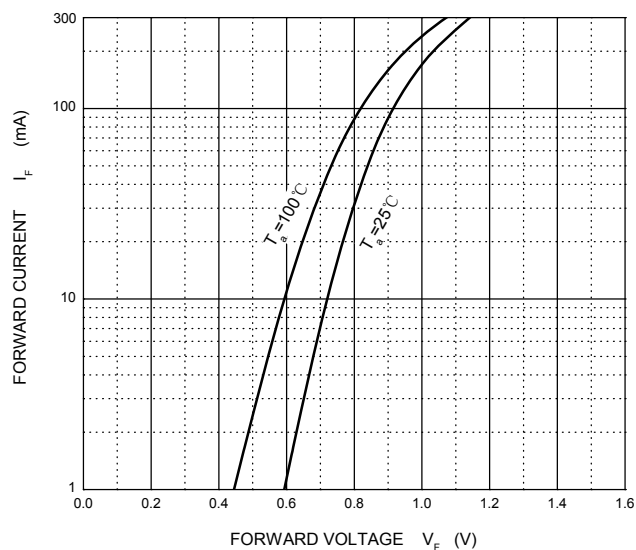
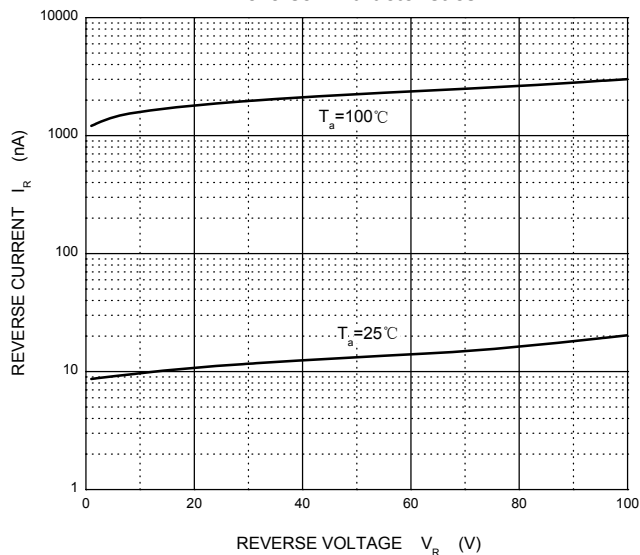
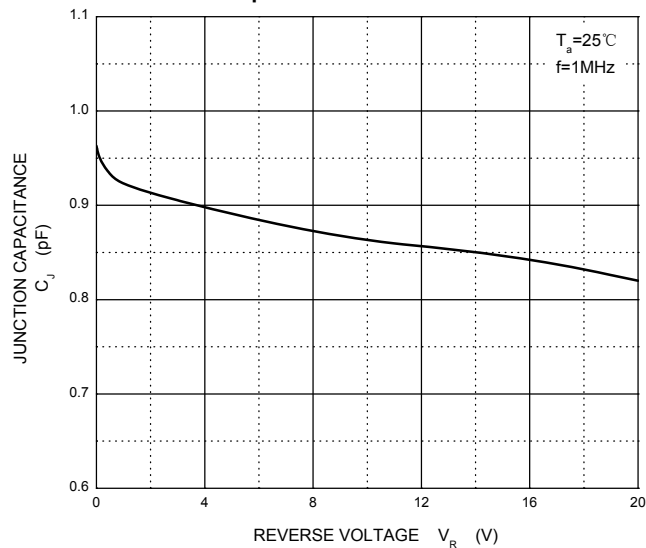
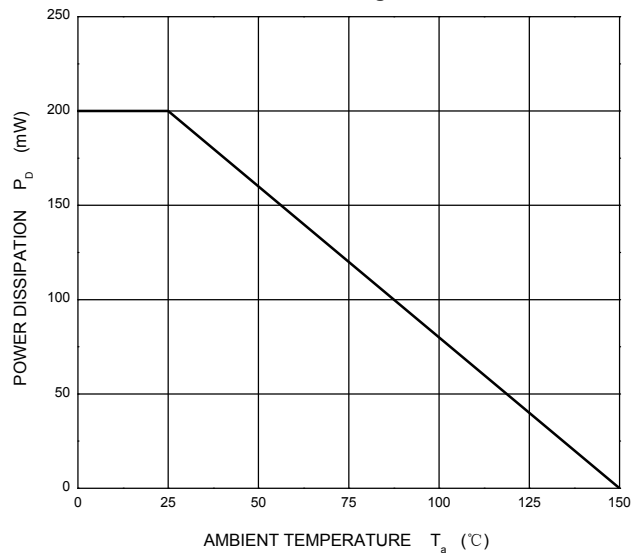
Maximum Ratings (@ $T_A=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3ms$	I_{FSM}	2.0	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

**Electrical Characteristics (@T_A=25°C unless otherwise specified)**

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V _(BR)	75			V	I _R =10μA
Forward voltage	V _{F1}			0.715	V	I _F =1mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =50mA
	V _{F4}			1.25	V	I _F =150mA
Reverse current	I _{R1}			1	μA	V _R =75V
	I _{R2}			25	nA	V _R =20V
Capacitance between terminals	C _T			2	pF	V _R =0V, f=1MHz
Reverse recovery time	t _{rr}			4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

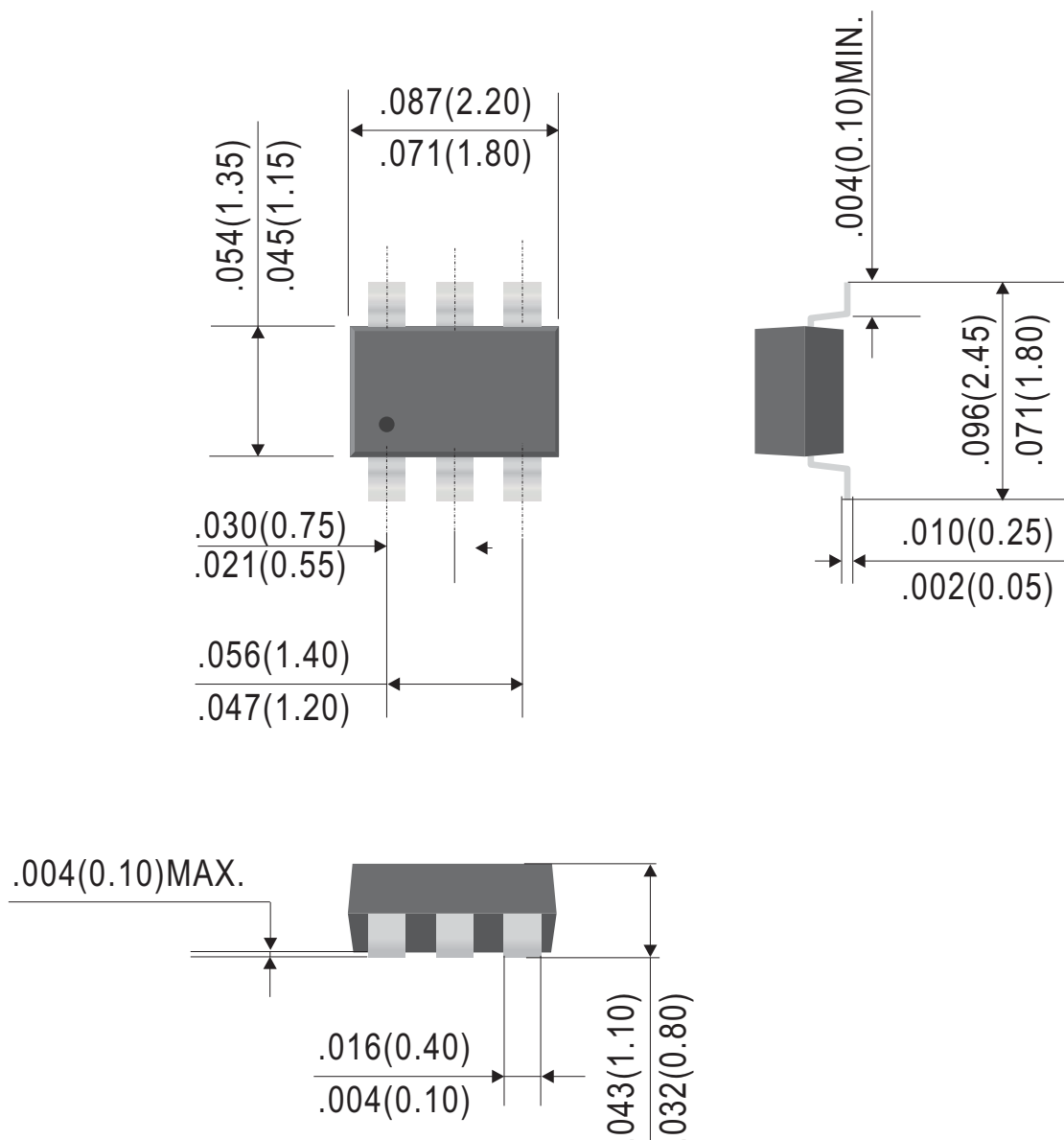
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve




Outline Drawing

SOT-363

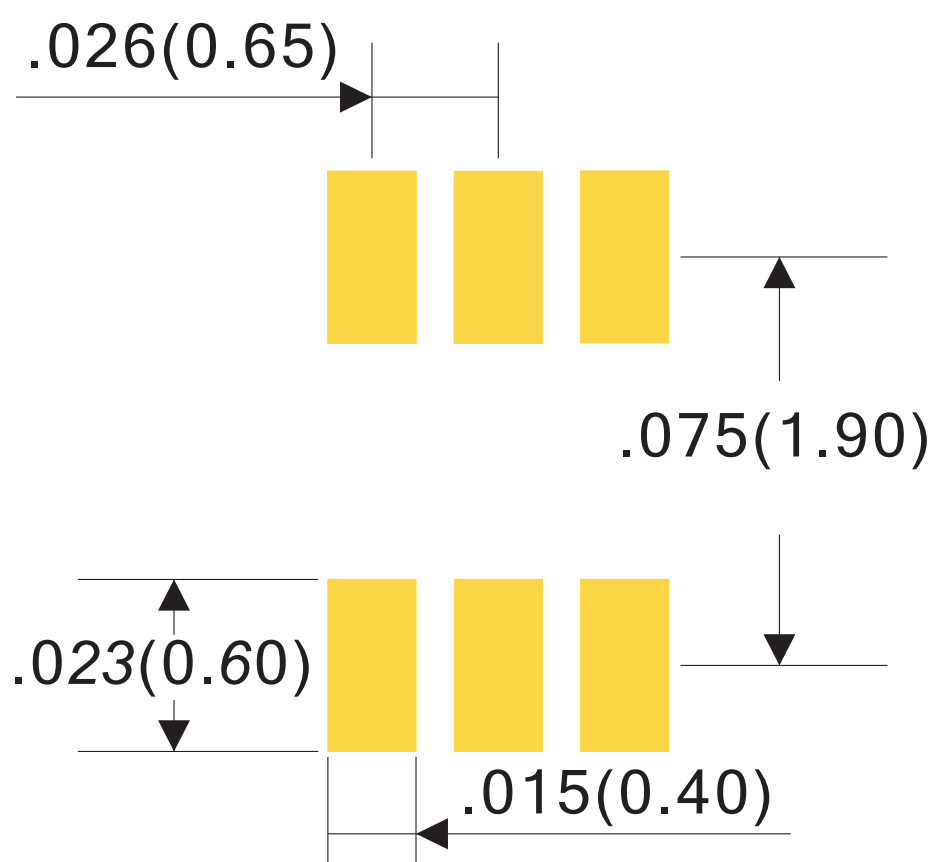


Dimensions in inches and (millimeters)

Rev.E

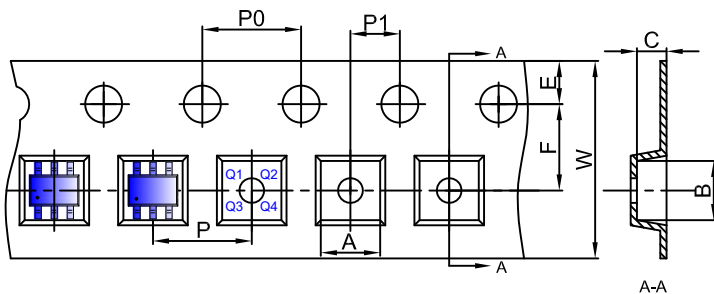


Suggested Soldering Pad Layout

SOT-363

Dimensions in inches and (millimeters)

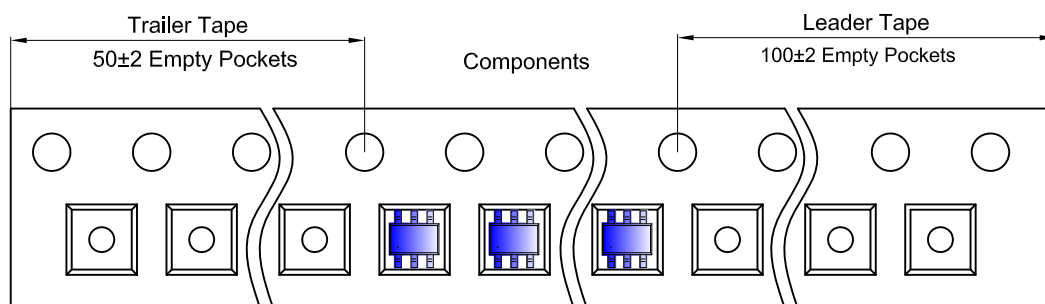
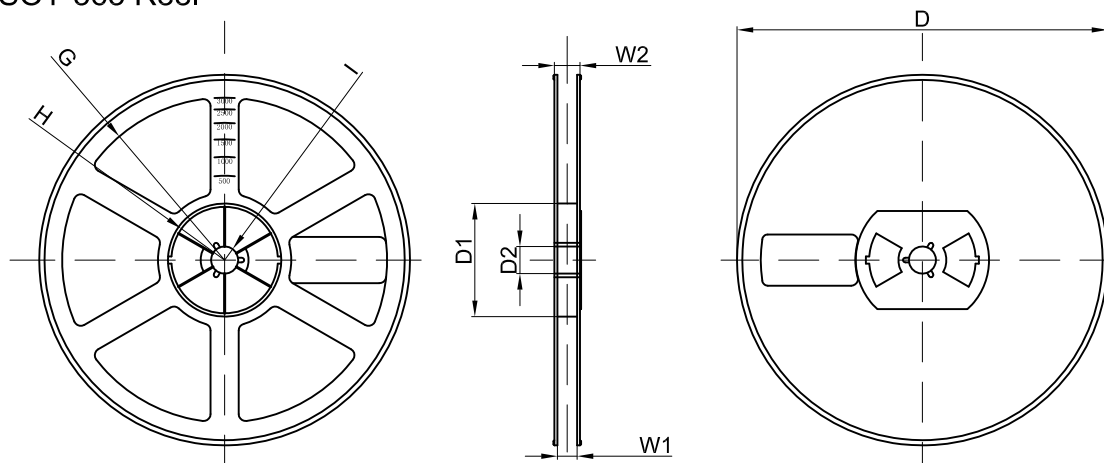
RevB

Plastic-Encapsulate Diodes
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).

PIN 1 Quadrant: Q3
DIRECTION OF FEED

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

SOT-363 Reel


Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

Ordering Information:

Device PN	Marking ⁽⁴⁾	Packing
BAS16TW1T1 ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	KA2	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product.
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(3) Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

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