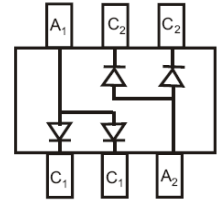
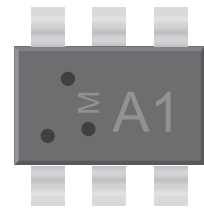
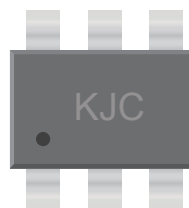


150mA Plastic-Encapsulate Switching Diode - 75V
PRIMARY CHARACTERISTICS

V_{RRM}	75V
I_O	150mA
$V_F@I_F=150mA$	1.25V
$T_{J,Max}$	150°C

SOT-363
PACKAGE


Marking :



M = Month Code

FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance
- Moisture Sensitivity Level 1

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



150mA Plastic-Encapsulate Switching Diode - 75V

Maximum Ratings @T_A=25°C

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 1.0s	I_{FSM}	2 1	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating Junction Temperature	T_J	150	°C
Storage temperature	T_{STG}	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 2.5\mu A$	75		V
Reverse voltage leakage current	I_R	$V_R = 75V$ $V_R = 20V$		2.5 0.025	μA
Forward voltage	V_F	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$		715 855 1000 1250	mV
Junction capacitance	C_T	$V_R = 0, f = 1MHz$		2	pF
Reveres recovery time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R,$ $R_L = 100\Omega$		4	nS

Typical Characteristics

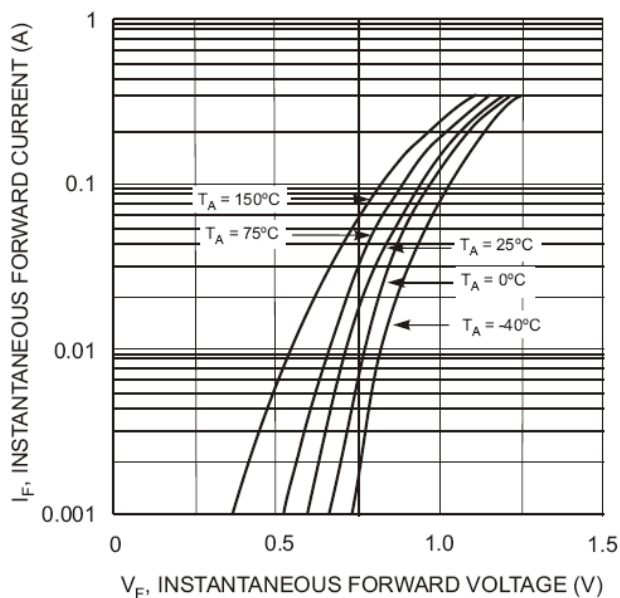


Fig. 1 Forward Characteristics

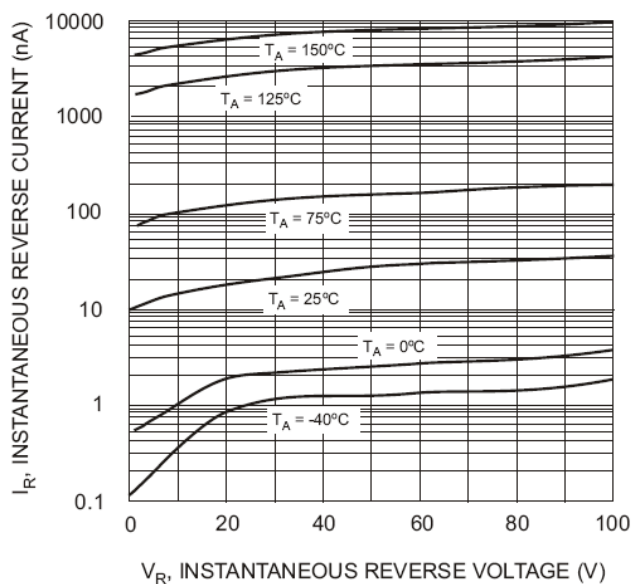


Fig. 2 Typical Reverse Characteristics

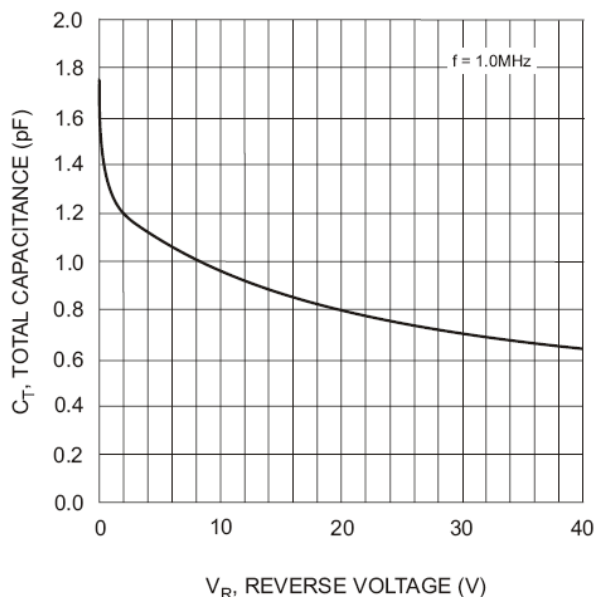


Fig. 3 Typical Capacitance vs. Reverse Voltage

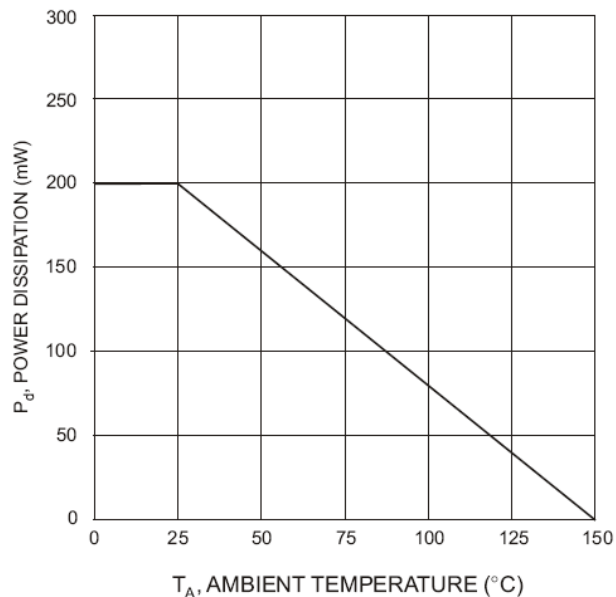
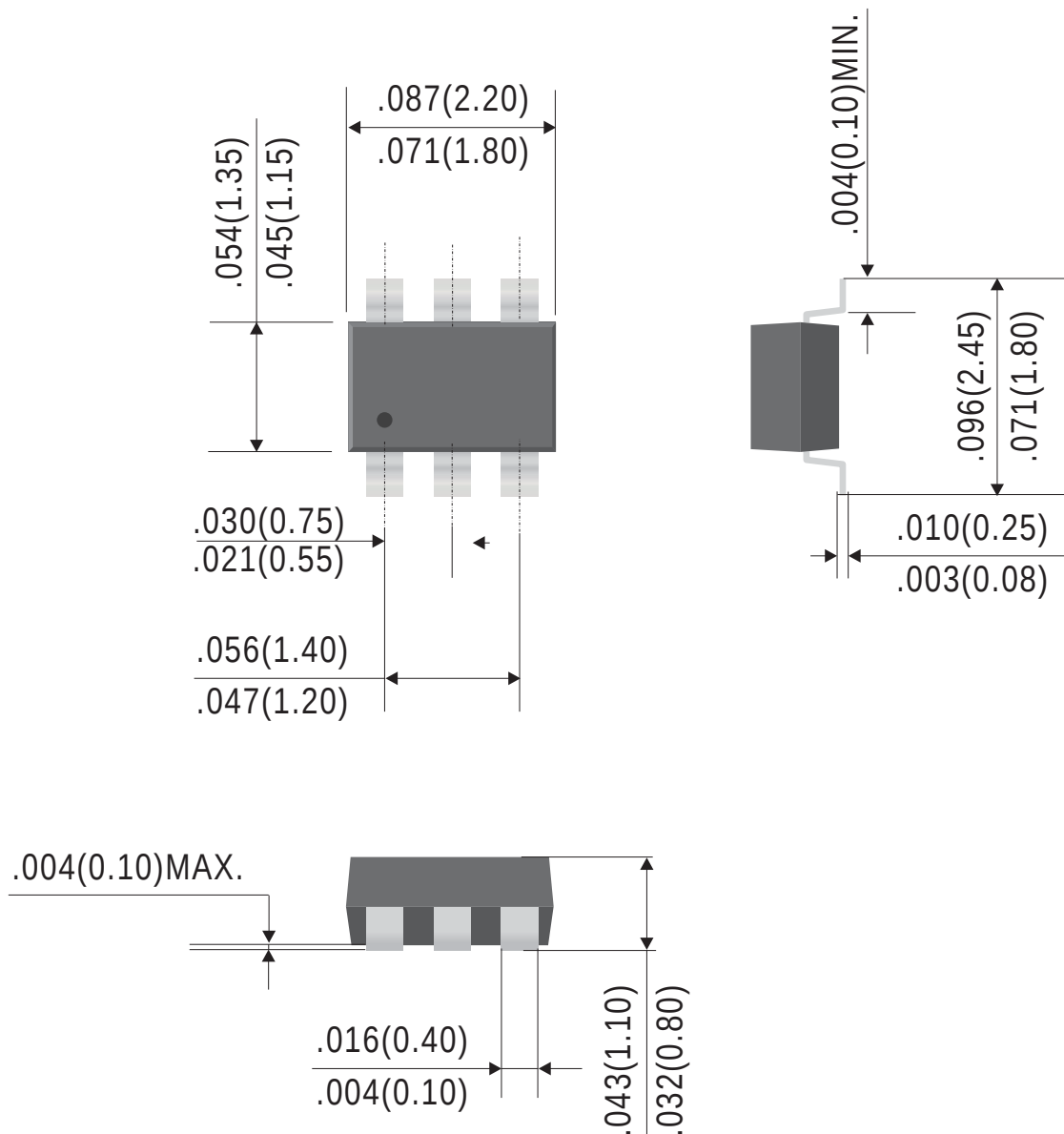


Fig. 4 Power Derating Curve

Outline Drawing

SOT-363

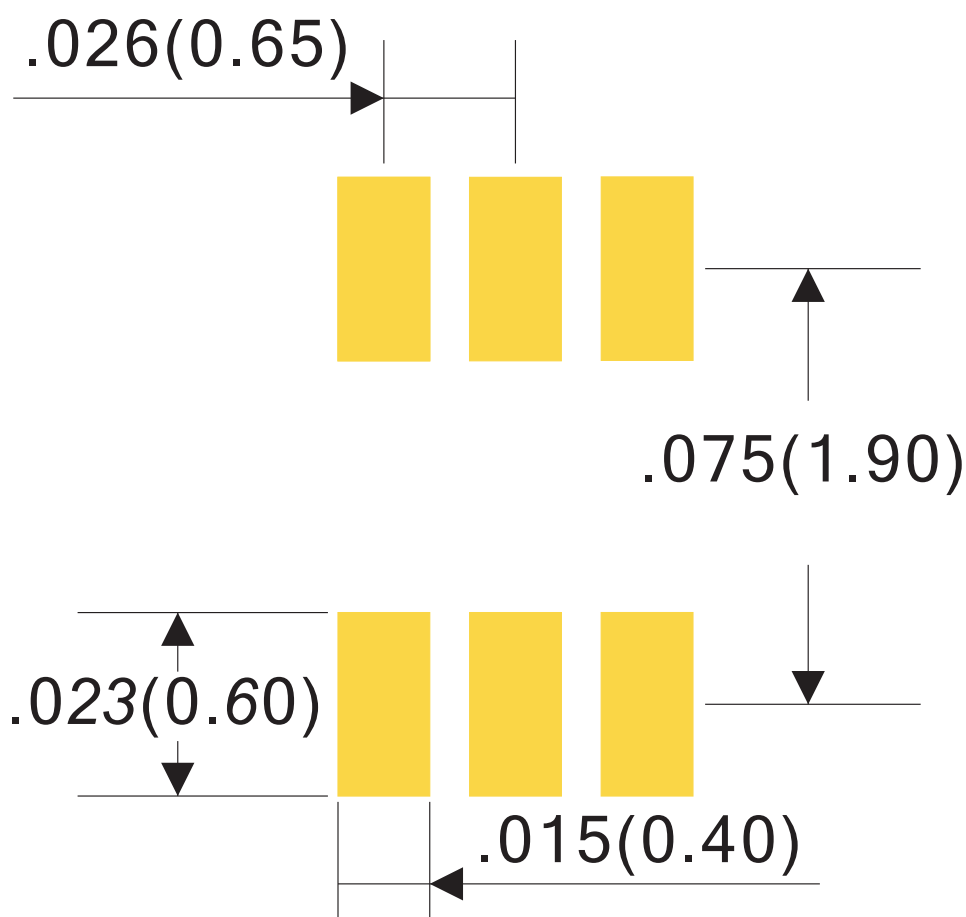


Dimensions in inches and (millimeters)

Rev.D

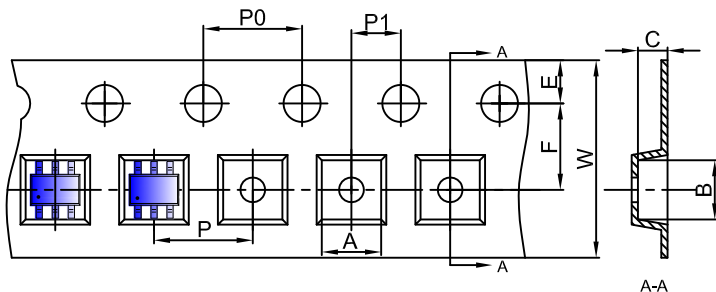


Suggested Soldering Pad Layout

SOT-363

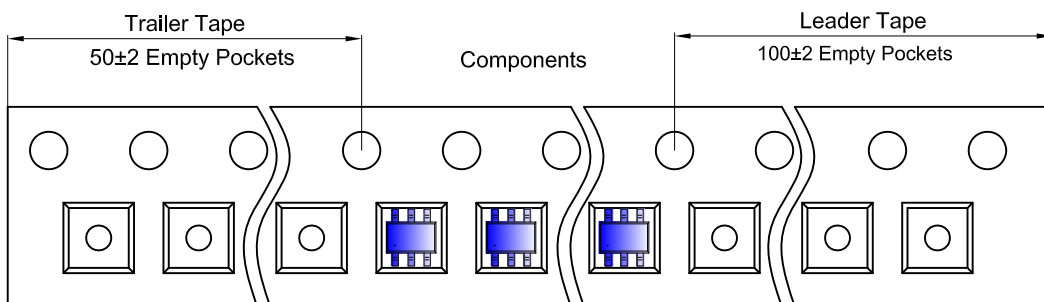
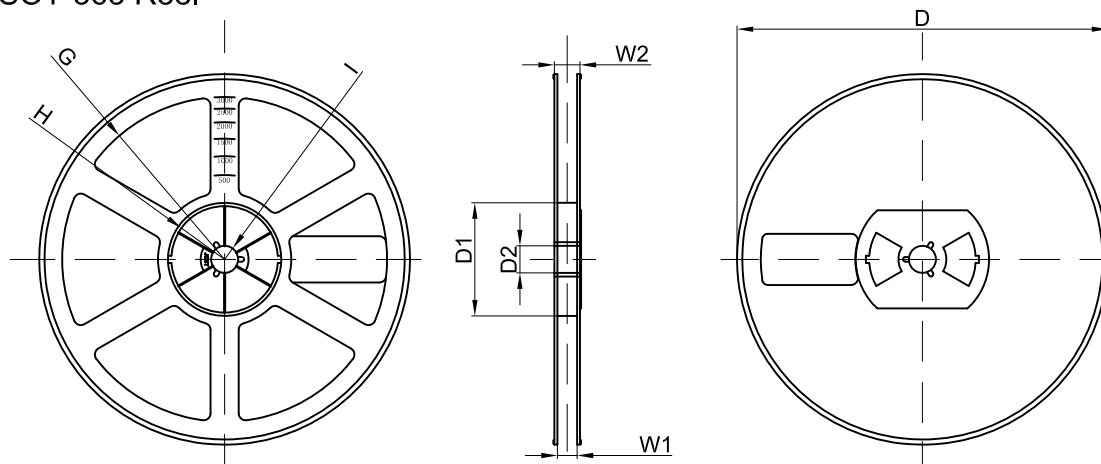
Dimensions in inches and (millimeters)

RevB

150mA Plastic-Encapsulate Switching Diode - 75V
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

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	Packing
BAW56DW-T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

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

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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