

SOT-23 Plastic-Encapsulate Diodes

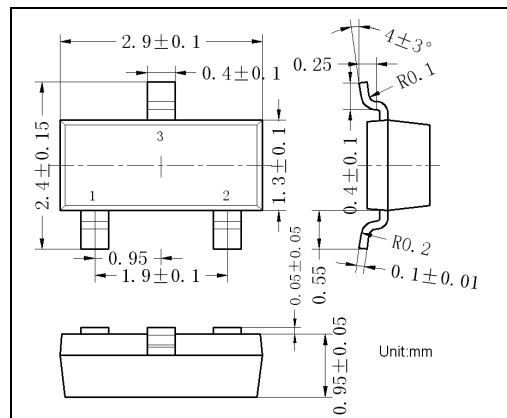
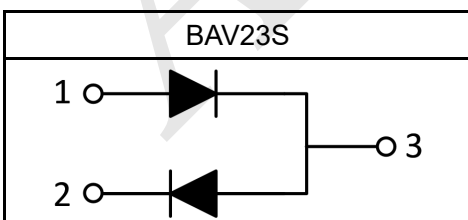
BAV23S

Switching Diode

Features

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

Marking: KL31

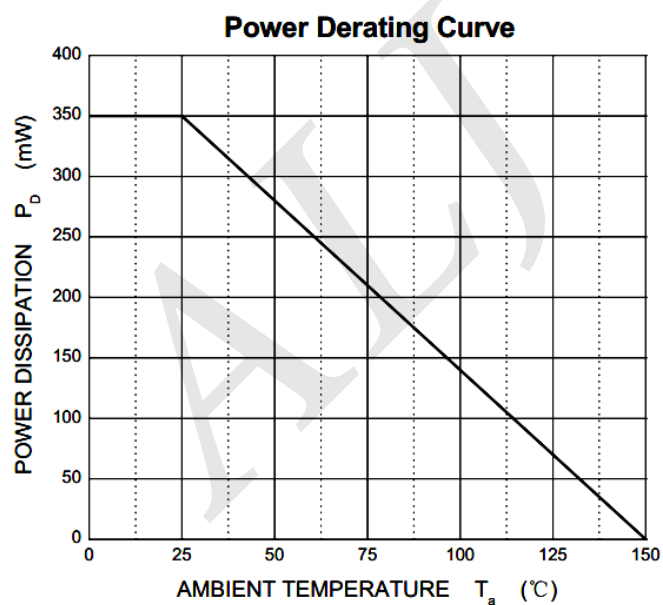
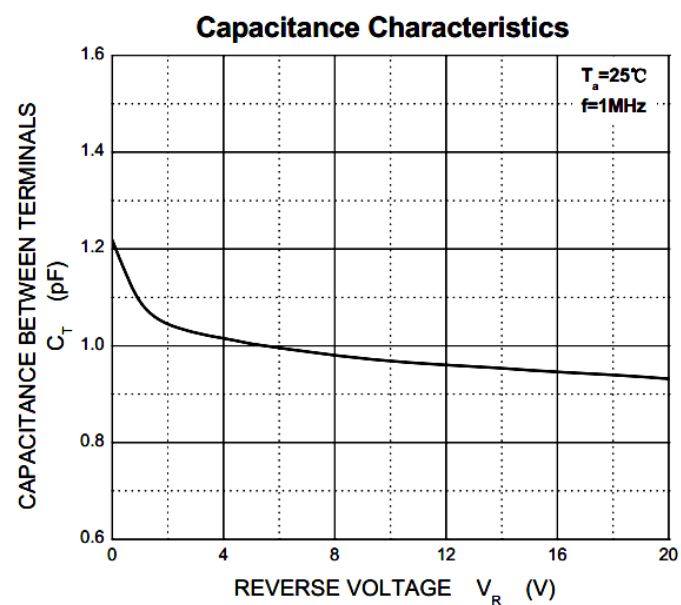
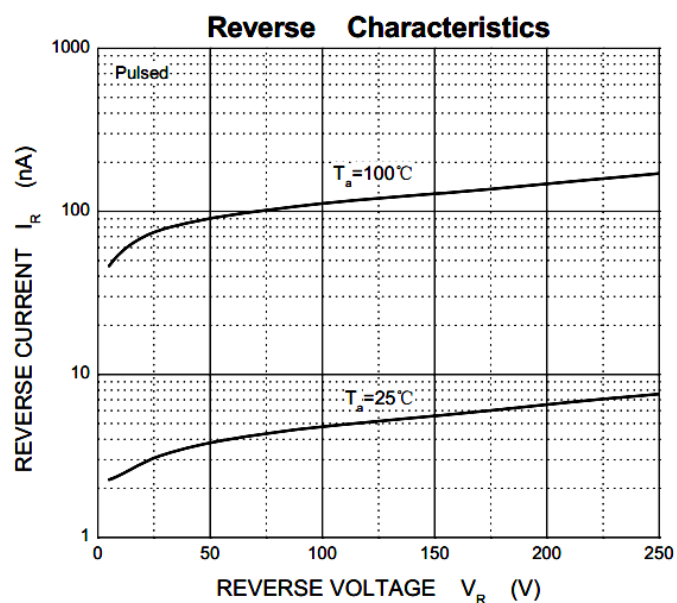
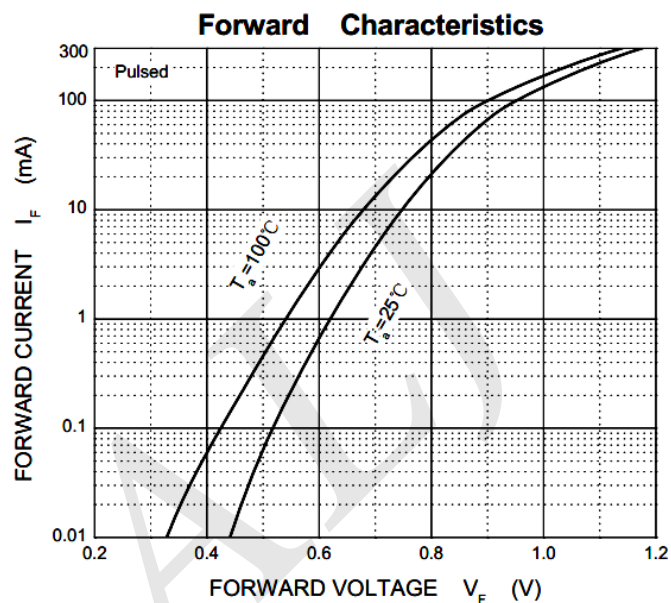


Maximum Ratings (T_a=25°C unless otherwise noted)

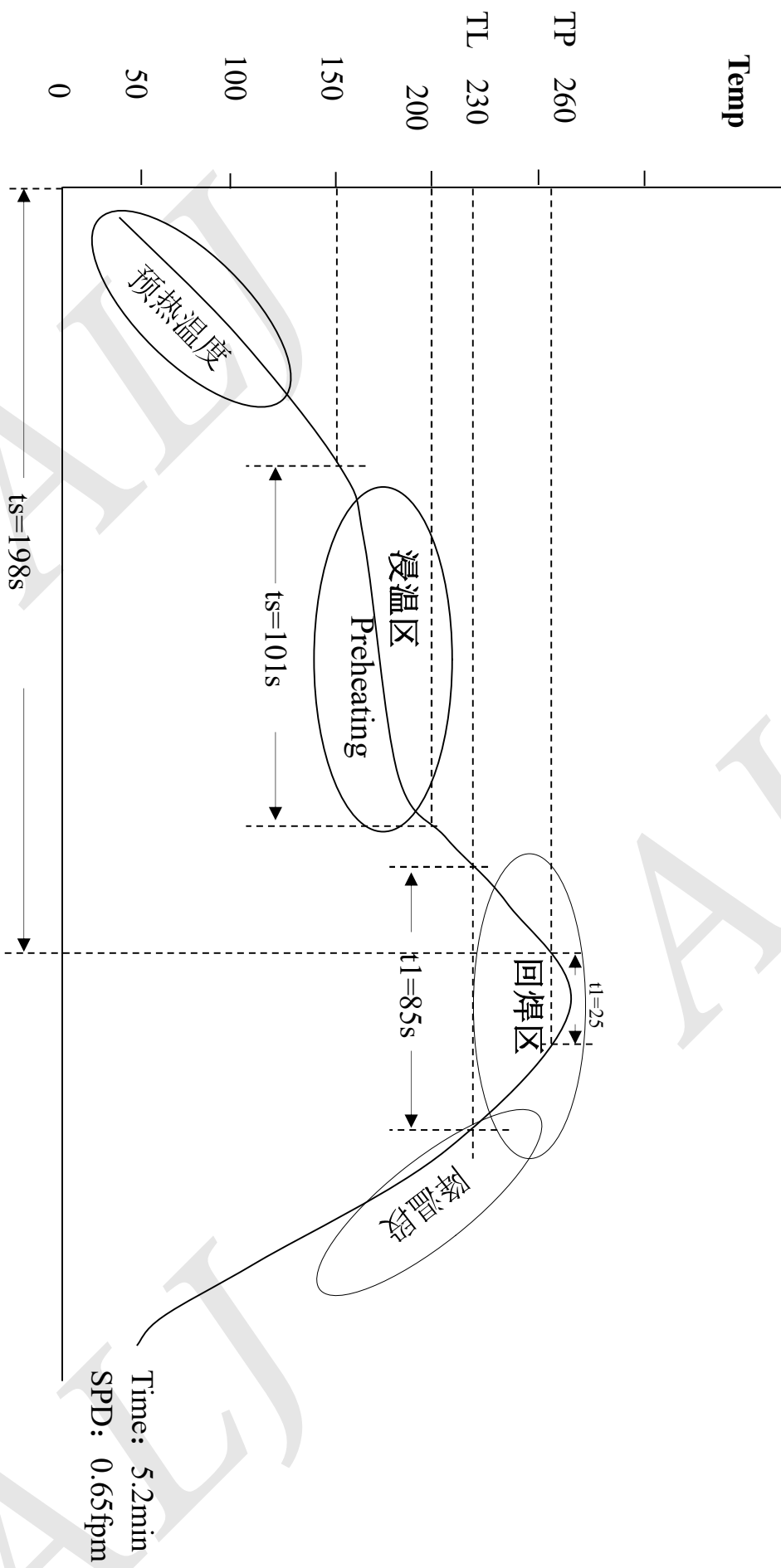
Symbol	Parameter	Value	Unit
V _{RRM}	Peak repetitive reverse voltage	250	V
V _{RWM}	Working peak reverse voltage	250	V
V _{R(RMS)}	RMS reverse voltage	175	V
I _O	Average Rectified Output Current	225	mA
I _{FRM}	Repetitive Peak Forward Surge Current	625	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	1.7	A
P _D	Power Dissipation	350	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	357	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

Electrical Characteristics (T_a=25°C unless otherwise specified)

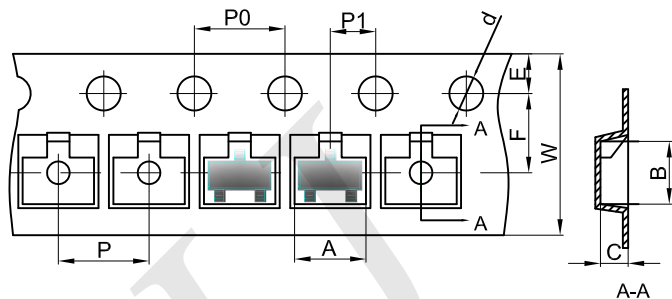
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _(BR)	Reverse voltage	I _R = 100uA	250			V
I _R	Reverse current	V _R = 250V			0.1	μA
V _F	Forward voltage	I _F = 100mA			1.0	V
		I _F = 200mA			1.25	V
C _{tot}	Total capacitance	V _R = 0V, f = 1MHz			5	pF
t _{rr}	Reverse recovery time	I _F = I _R = 30mA, I _{rr} = 0.1×I _R , R _L =100Ω			50	ns



IR—Reflow Profile



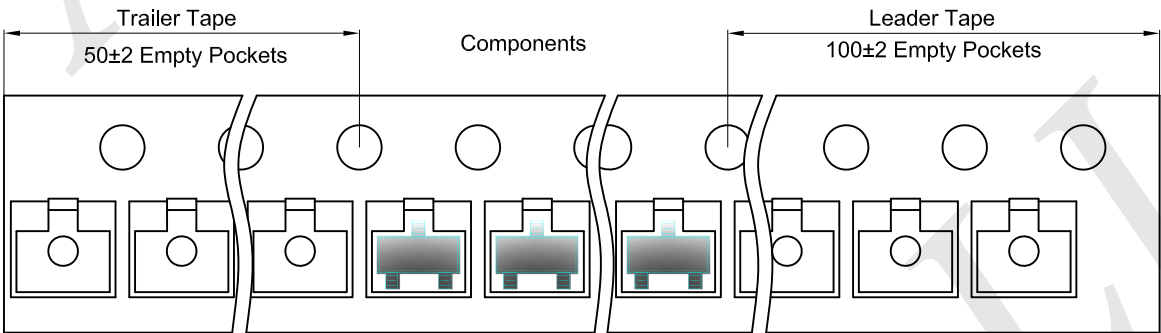
SOT-23 Embossed Carrier Tape



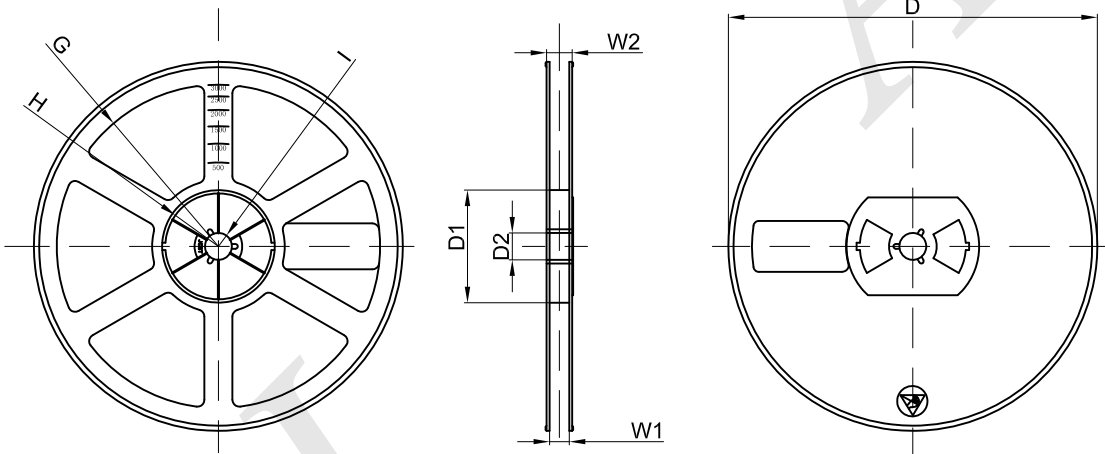
Packaging Description:
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. 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-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 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

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	