

SOT-23

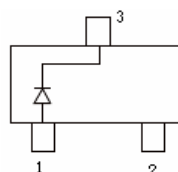


FEATURES

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

Marking: A6

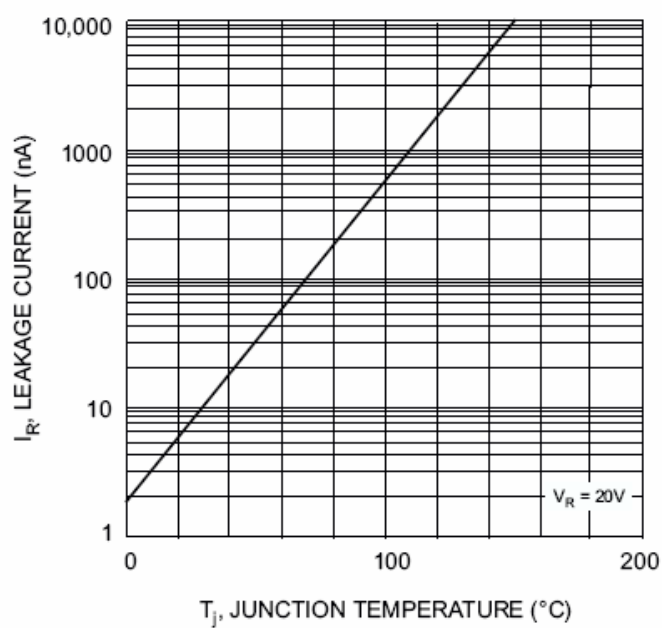
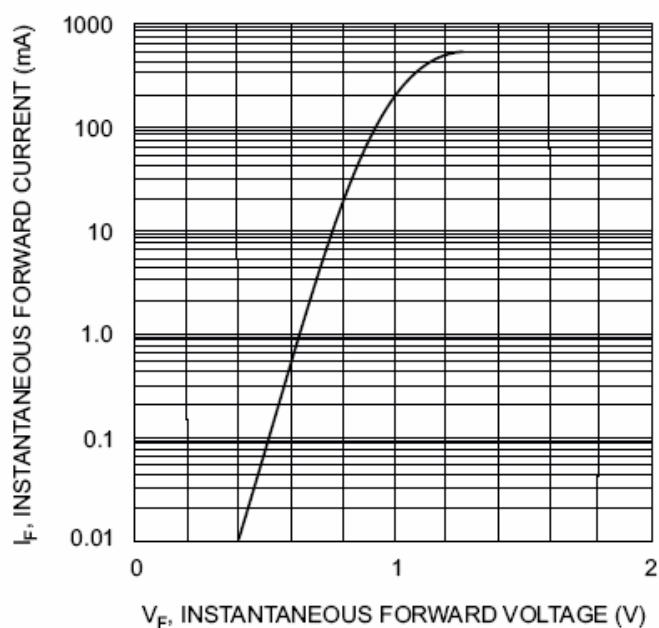
Maximum Ratings @T_A=25°C



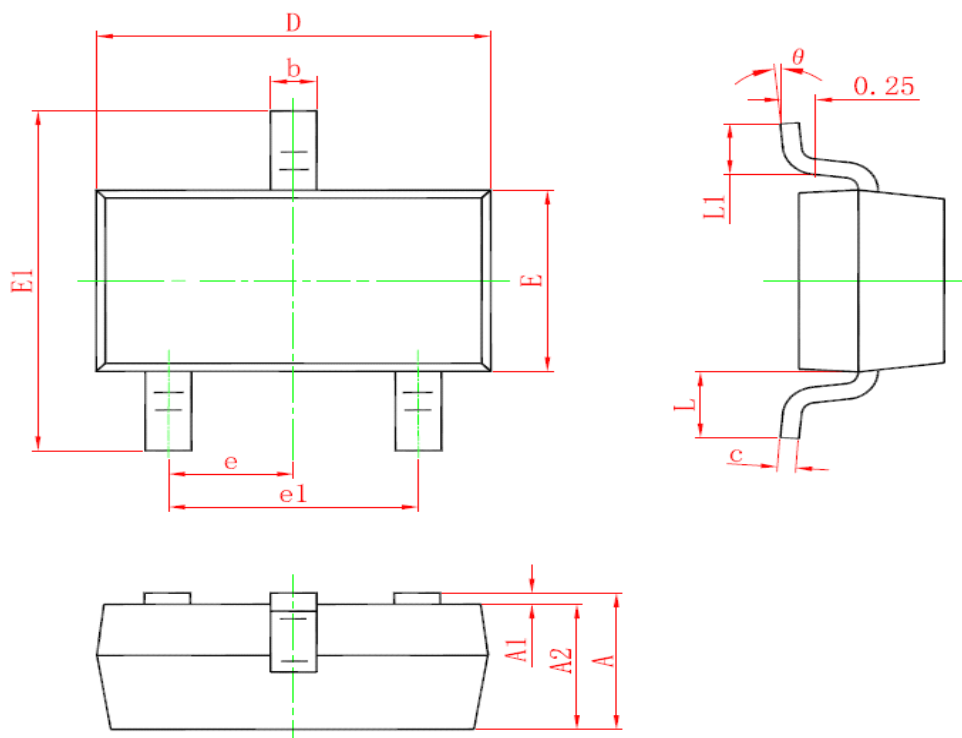
Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100	V
Peak Repetitive Peak reverse voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Peak forward surge current @=1.0μs	I _{FSM}	2.0	A
@=1.0s		1.0	
Power Dissipation	P _D	225	mW
Thermal Resistance Junction to Ambient	R _{θJA}	556	°C/W
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 = 100μA	75		V
Reverse voltage leakage current	I _R	V _R =75V		1	μA
Forward voltage	V _F	I _F =1mA I _F =10mA I _F =50mA I _F =150mA		0.715 0.855 1 1.25	V
Diode capacitance	C _D	V _R =0, f=1MHz		2	pF
Reveres recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1×I _R , R _L =100Ω		6	nS



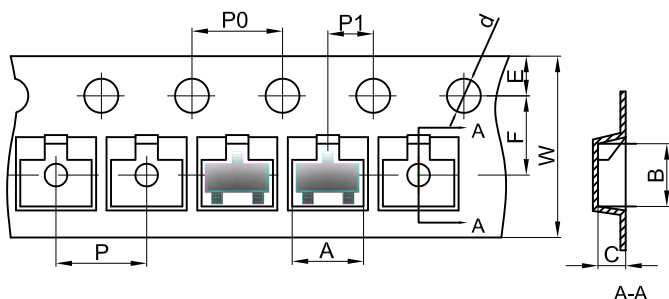
Package Outline Dimensions (Units: mm)



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	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.079
θ	0°	8°	0°	8°

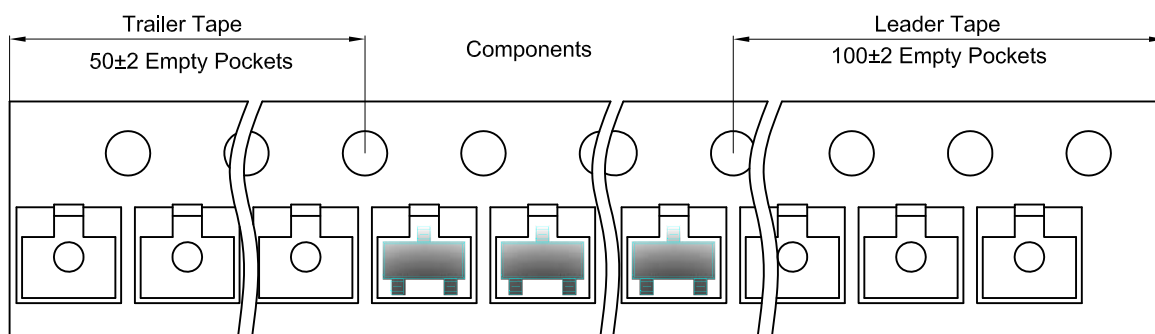
SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

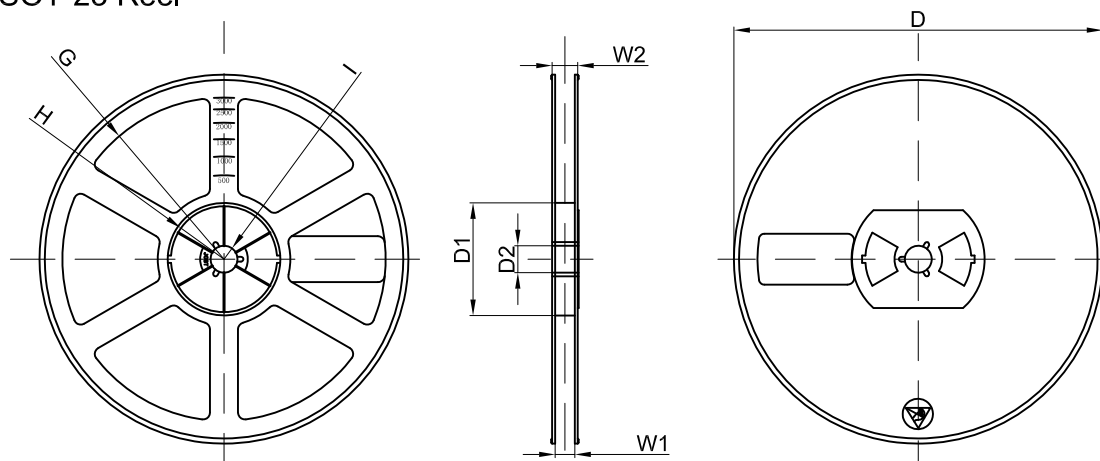


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

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	192x182x182	180,000 pcs	400x385x385	