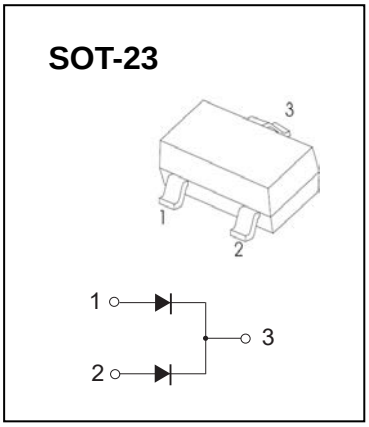
SZCJ

Shenzhen Changji Semiconductor Co., LTD.

SOT-23 Plastic-Encapsulate Diodes

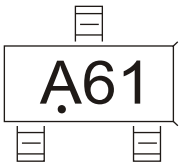
MC2838 SWITCHING DIODE



FEATURES

- High speed switching
- Low capacitance

MARKING:A61



A61 = Device code
Solid dot = Green molding compound device.

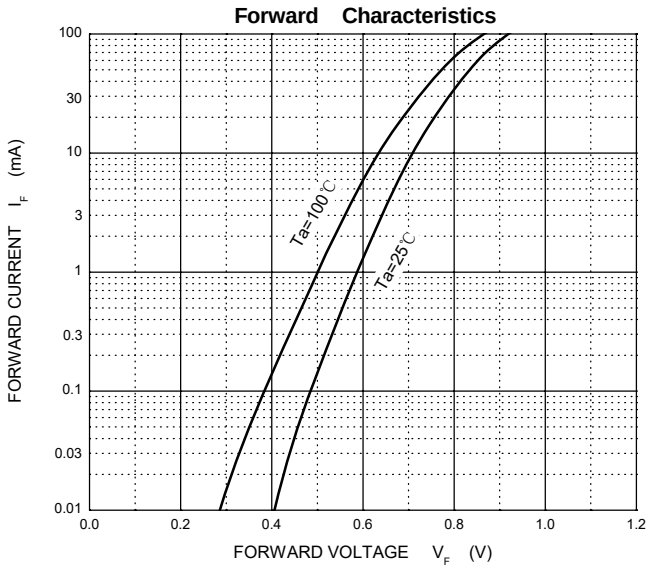
Maximum Ratings @Ta=25℃

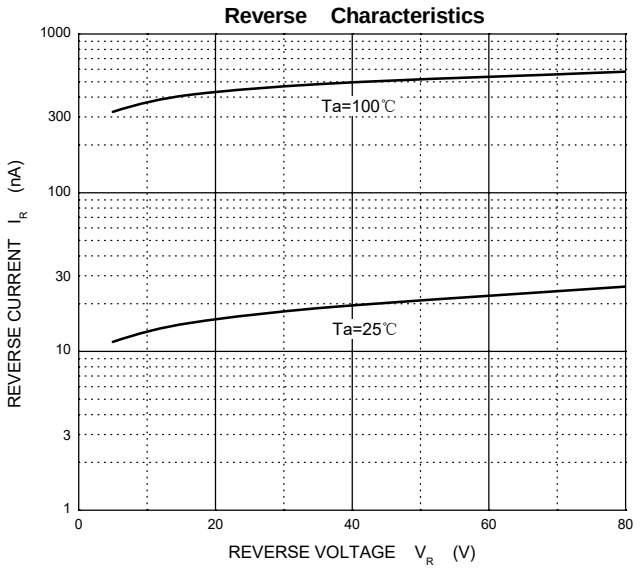
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	75	V
DC Blocking Voltage	V_R	50	V
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Average Rectified Output Current	I_O	100	mA
Power Dissipation	P_D	150	mW
Thermal resistance From Junction to ambient	$R_{\theta JA}$	833	℃/W
Operation Junction and Storage Temperature Range	T_J,T_{STG}	-55~+150	℃

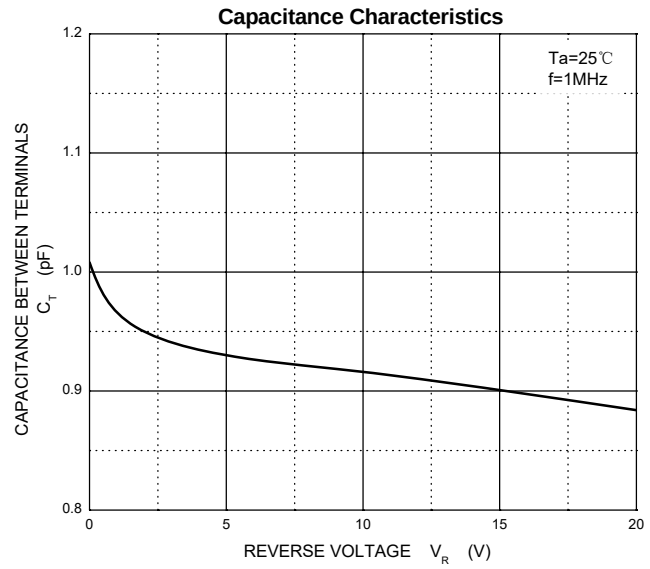
Electrical Characteristics @Ta=25℃

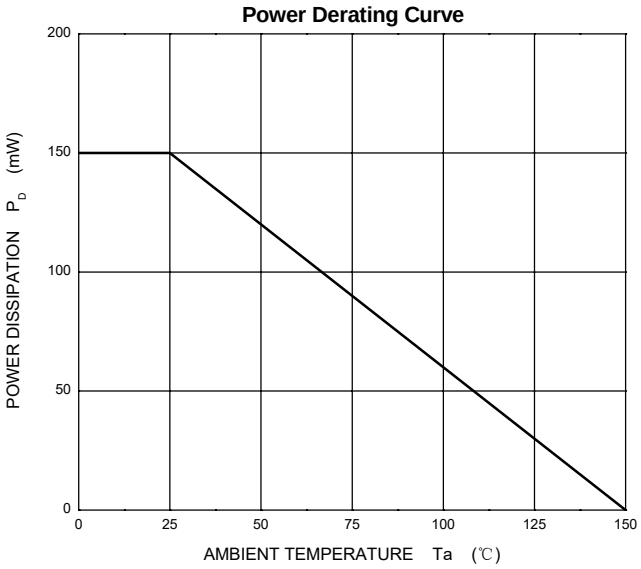
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	I_F=10mA		0.67	0.9	V
	V_{F2}	I_F=50mA		0.75	1.0	V
	V_{F3}	I_F=100mA		0.85	1.2	V
Reverse current	I_R	V_R=50V			0.1	uA
Reverse recovery time	t_{rr}	I_F=10mA,V_R=6V,R_L=100Ω I_{rr}=0.1*I_R			3.0	ns
Capacitance between terminals	C_T	V_R=0,f=1MHz		1.1	4.0	pF

Typical Characteristics

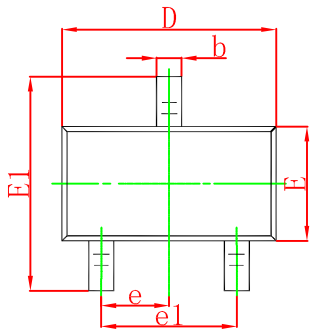


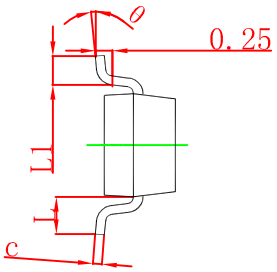


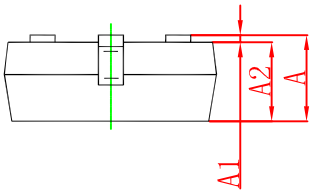




SOT-23 Package Outline Dimensions

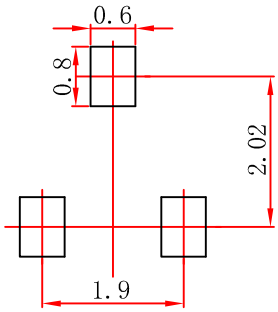






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout

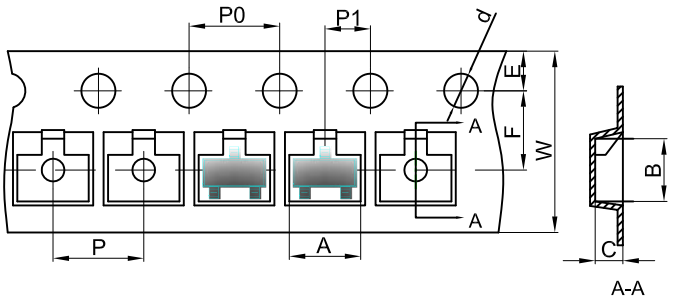


Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

NOTICE

SZCJ reserves the right to make modifications,enhan nts,improvements,corrections or other es without further notice to any product herein. SZCJ does not assume any liability arising out of the application or use of any product described h

SOT-23 Embossed Carrier Tape

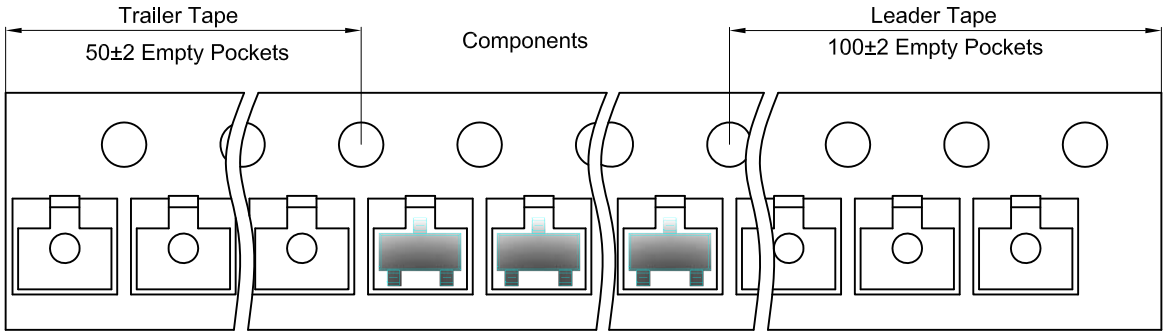


Packaging Description:

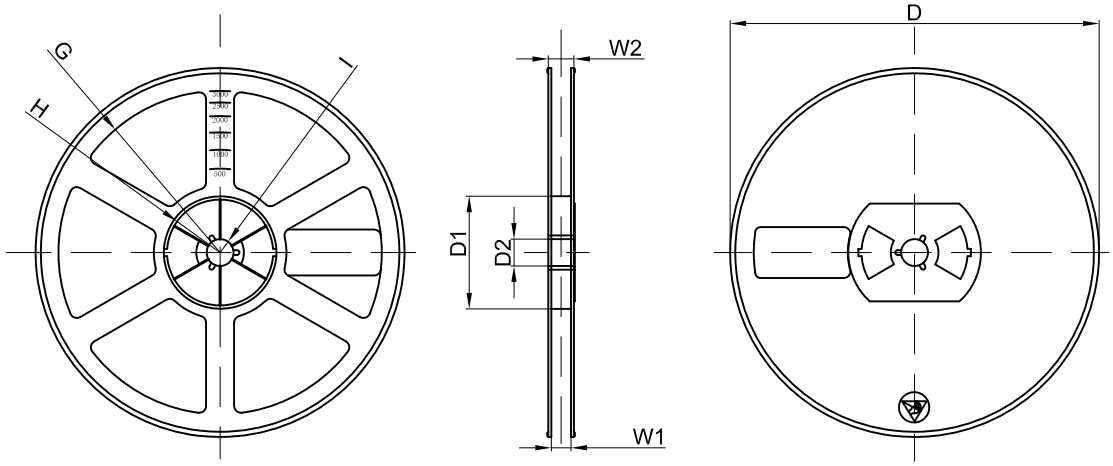
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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	