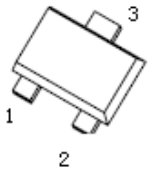
SZCJ Shenzhen Changji Semiconductor Co., LTD.

SOT-723 Plastic-Encapsulate MOSFETS

2SK3541 N-Channel MOSFET

$V_{(BR)DSS}$	$R_{DS(on)}$MAX	I_D
30 V	8Ω@4V	100mA
	13Ω@2.5V	

SOT-723



1. GATE
2. SOURCE
3. DRAIN

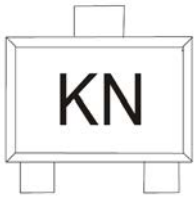
FEATURE

- Low on-resistance
- Fast switching speed
- Low voltage drive makes this device ideal for Portable equipment
- Drive circuits can be simple
- Parallel use is easy

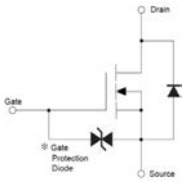
APPLICATION

- Interfacing , Switching

MARKING



Equivalent Circuit



Maximum ratings (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	30	V
Gate-source voltage	V_{GS}	±20	
Continuous drain current	I_D	100	mA
Power dissipation	P_D	0.15	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	833	℃/W
Operation Junction and Storage Temperature Range	T_J,T_{stg}	-55 ~+150	℃

* Pw≤10μs ,Duty cycle≤1%

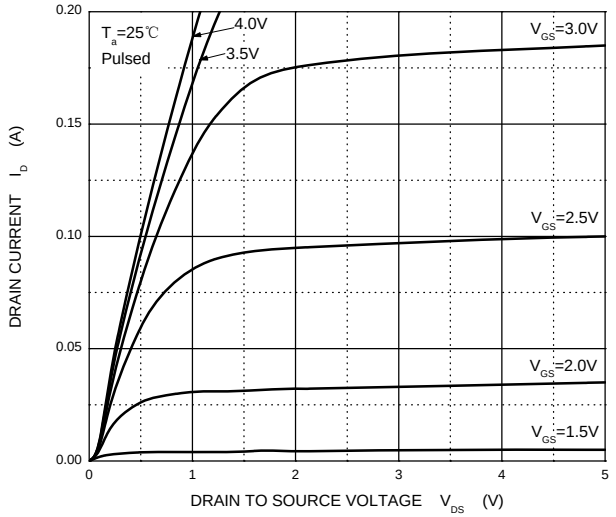
MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

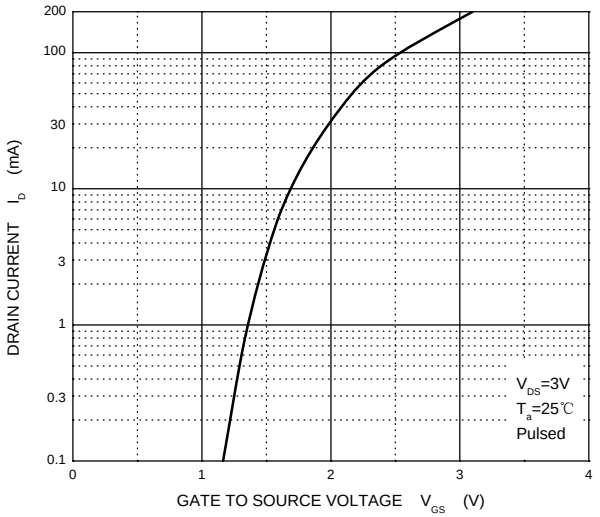
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Drain-source breakdown voltage	$V_{(BR)\ DSS}$	V_{GS} = 0V, I_D =10μA	30			V
Gate-source leakage current	I_{GSS}	V_{DS} =0V, V_{GS} =±20V			±2	μA
Zero gate voltage drain current	I_{DSS}	V_{DS} =30V, V_{GS} =0V			1.0	μA
Gate threshold voltage	$V_{GS(th)}$	V_{DS} =3V, I_D =100μA	0.8		1.5	V
Static drain-source on-state resistance	$R_{DS(on)}$	V_{GS} =4V, I_D =10mA		5	8	Ω
		V_{GS} =2.5V, I_D =1mA		7	13	
Forward transconductance	g_{FS}	V_{DS} =3V, I_D =10mA	20			mS
Input capacitance	C_{iss}	V_{DS} =5V,V_{GS} =0V,f =1MHz		13		pF
Output capacitance	C_{oss}			9		
Reverse transfer capacitance	C_{rss}			4		
Turn-on delay time	$t_{d(on)}$	V_{GS}=5V,V_{DD}=5V, I_D =10mA R_L=500Ω,R_G=10Ω		15		ns
Rise time	t_r			35		
Turn-off delay time	$t_{d(off)}$			80		
Fall time	t_f			80		

Typical Characteristics

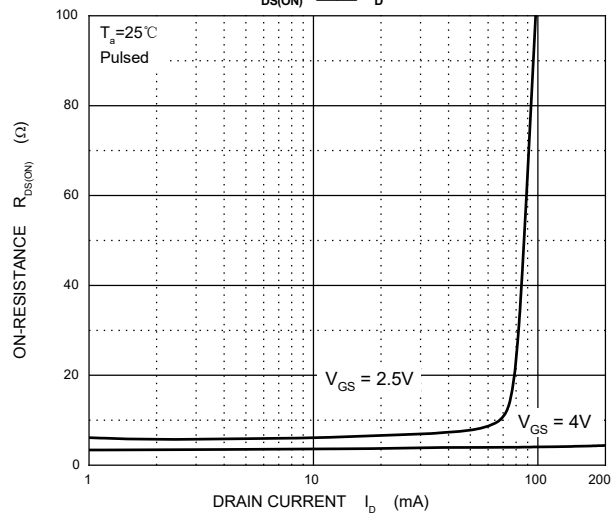
Output Characteristics



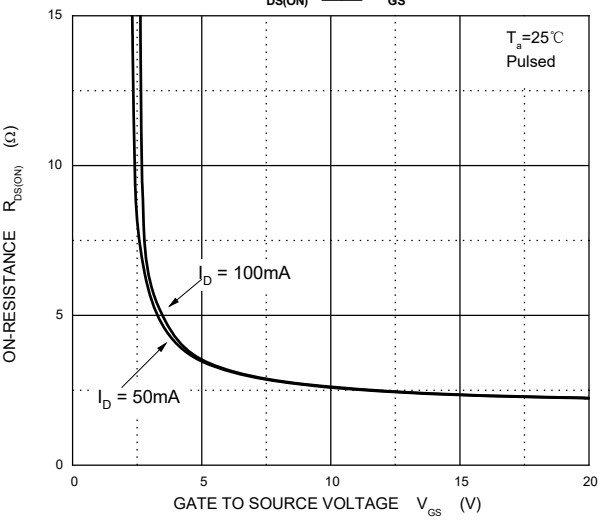
Transfer Characteristics



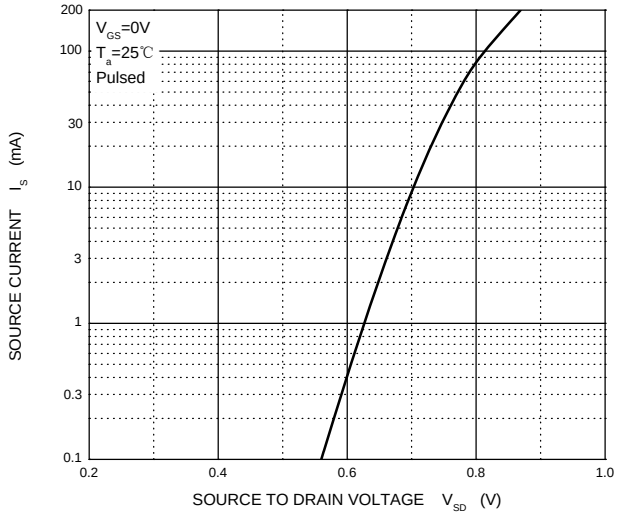
$R_{DS(ON)}$ —— I_D



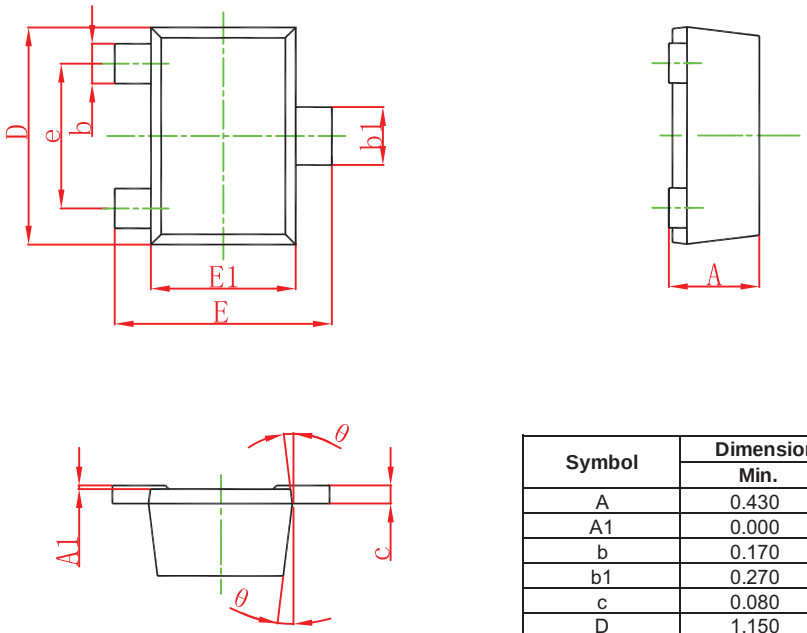
$R_{DS(ON)}$ —— V_{GS}



I_S —— V_{SD}

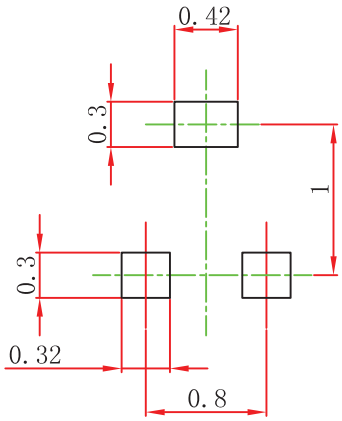


SOT-723 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.430	0.500	0.017	0.020
A1	0.000	0.050	0.000	0.002
b	0.170	0.270	0.007	0.011
b1	0.270	0.370	0.011	0.015
c	0.080	0.150	0.003	0.006
D	1.150	1.250	0.045	0.049
E	1.150	1.250	0.045	0.049
E1	0.750	0.850	0.030	0.033
e	0.800TYP.		0.031TYP.	
θ	7° REF.		7° REF.	

SOT-723 Suggested Pad Layout



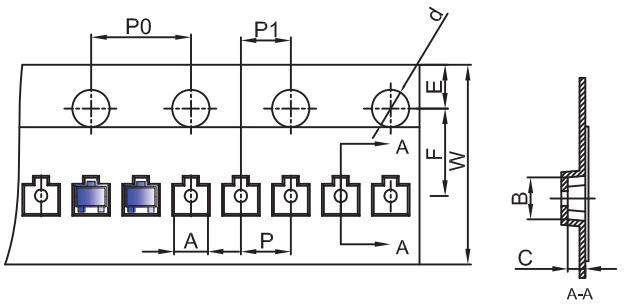
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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-723 Tape and Reel

SOT-723 Embossed Carrier Tape

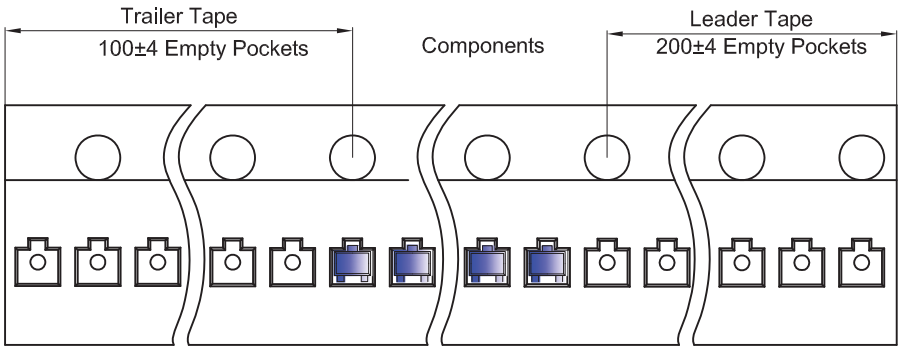


Packaging Description:

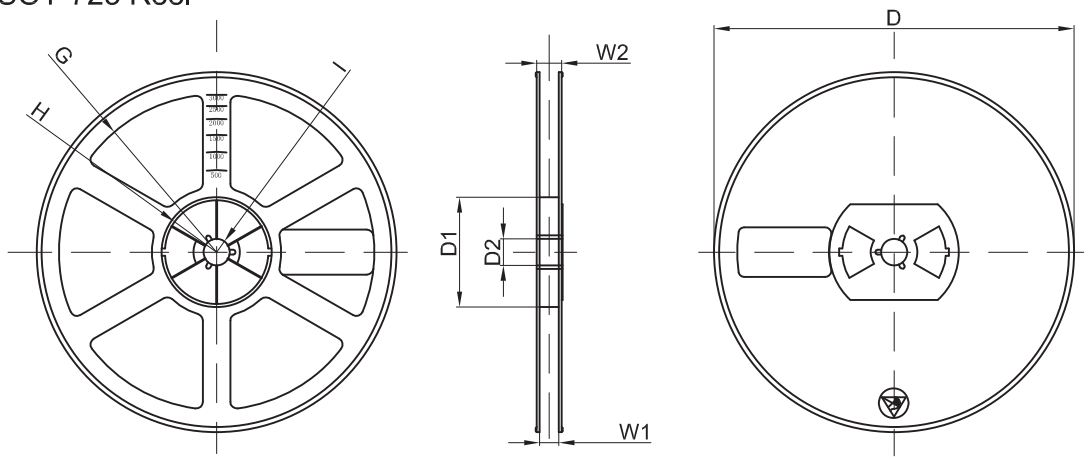
SOT-723 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 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-723	1.33	1.45	0.61	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

SOT-723 Tape Leader and Trailer



SOT-723 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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8,000 pcs	7 inch	120,000 pcs	210×208×205	480,000 pcs	440×440×230	

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