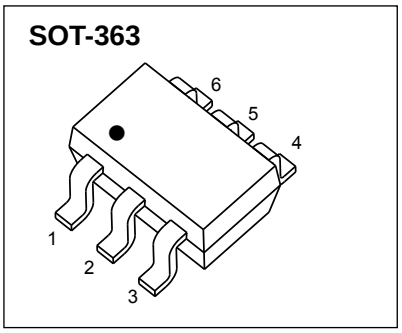
SZCJ

Shenzhen Changji Semiconductor Co., LTD.

SOT-363 Plastic-Encapsulate MOSFETs

CJ3134KDW Dual N-Channel MOSFET

$V_{(BR)DSS}$	$R_{DS(on)}$MAX	I_D
20V	380mΩ@4.5V	0.75A
	450mΩ@2.5V	
	800mΩ@1.8V	



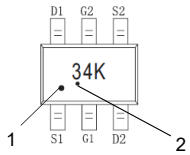
FEATURE

- Lead Free Product is Acquired
- Surface Mount Package
- N-Channel Switch with Low $R_{DS(on)}$
- Operated at Low Logic Level Gate Drive
- Equivalent to Two CJ3134K

APPLICATION

- Load/Power Switching
- Interfacing Switching
- Battery Management for Ultra Small Portable Electronics
- Logic Level Shift

MARKING

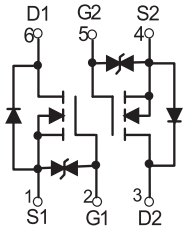


34K=Device code

Solid dot1=Pin1 indicator

Solid dot2= Green molding compound device

Equivalent Circuit



ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	20	V
Typical Gate-source voltage	V_{GS}	±12	V
Continuous drain current (t ≤10s)	I_D	0.75	A
Power dissipation*	P_D	0.15	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	833	℃/W
Junction temperature	T_J	150	℃
Storage temperature	T_{stg}	-55~ +150	℃

* Repetitive rating : Pulse width limited by junction temperature.

MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

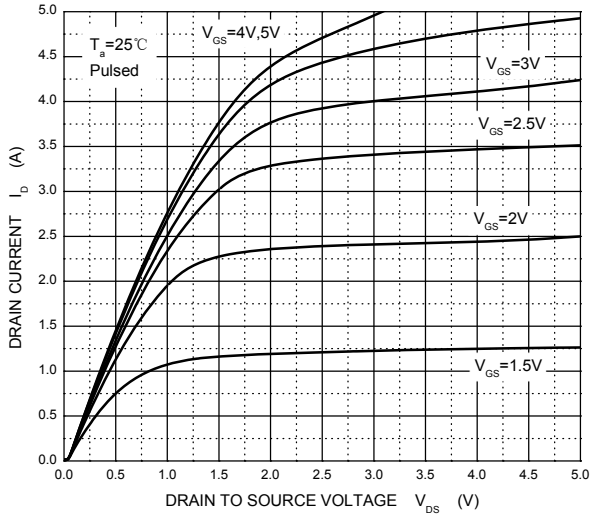
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
Drain-source breakdown voltage	$V_{(BR)DSS}$	V_{GS} = 0V, I_D =250μA	20			V
Zero gate voltage drain current	I_{DSS}	V_{DS} =20V,V_{GS} = 0V			1	μA
Gate-body leakage current	I_{GSS}	V_{GS} =±10V, V_{DS} = 0V			±20	μA
Gate threshold voltage (note 1)	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D =250μA	0.35	0.54	1.1	V
Drain-source on-resistance (note 1)	$R_{DS(on)}$	V_{GS} =4.5V, I_D =0.65A		270	380	mΩ
		V_{GS} =2.5V, I_D =0.55A		320	450	mΩ
		V_{GS} =1.8V, I_D =0.45A		390	800	mΩ
Forward tranconductance (note 1)	g_{FS}	V_{DS} =10V, I_D =0.8A		1.6		S
Diode forward voltage(note 1)	V_{SD}	I_S=0.15A, V_{GS} = 0V			1.2	V
DYNAMIC PARAMETERS (note 2)						
Input Capacitance	C_{iss}	V_{DS} =16V,V_{GS} =0V,f =1MHz		79	120	pF
Output Capacitance	C_{oss}			13	20	pF
Reverse Transfer Capacitance	C_{rss}			9	15	pF
SWITCHING PARAMETERS(note 2)						
Turn-on delay time	$t_{d(on)}$	V_{GS}=4.5V,V_{DS}=10V, I_D=0.5A,R_{GEN}=10Ω		6.7		ns
Turn-on rise time	t_r			4.8		ns
Turn-off delay time	$t_{d(off)}$			17.3		ns
Turn-off fall time	t_f			7.4		ns
Total Gate Charge	Q_g	V_{DS} =10V,V_{GS} =4.5V,I_D =0.25A		750		pC
Gate-Source Charge	Q_{gs}			75		pC
Gate-Drain Charge	Q_{gd}			225		pC

Notes :

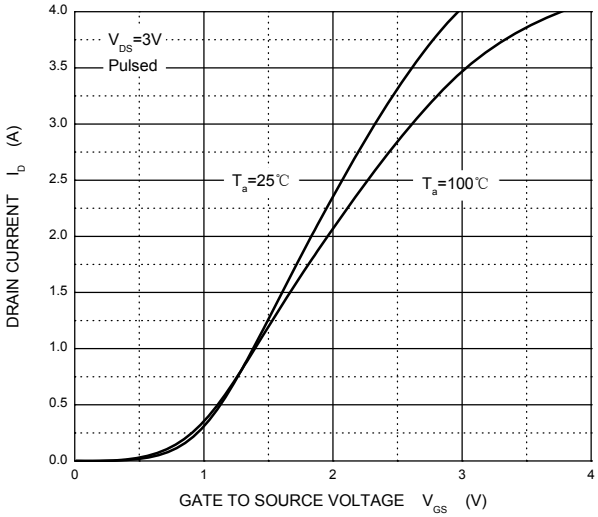
1. Pulse Test : Pulse width≤300μs, duty cycle≤0.5%.
2. Guaranteed by design, not subject to production testing.

Typical Characteristics

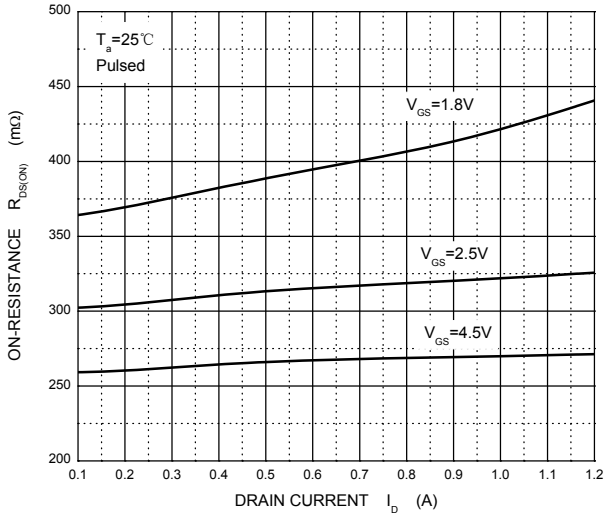
Output Characteristics



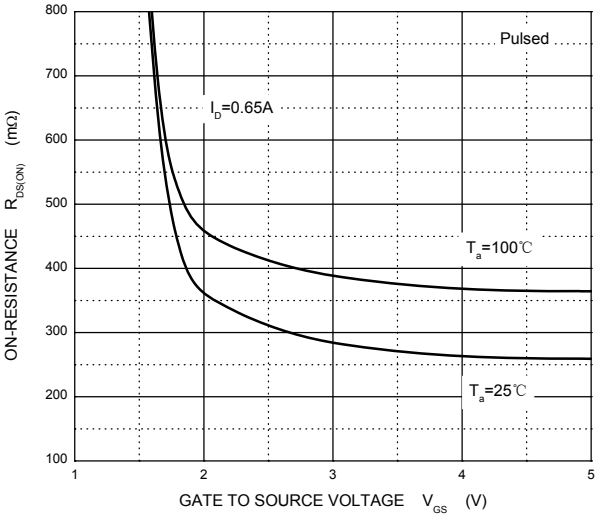
Transfer Characteristics



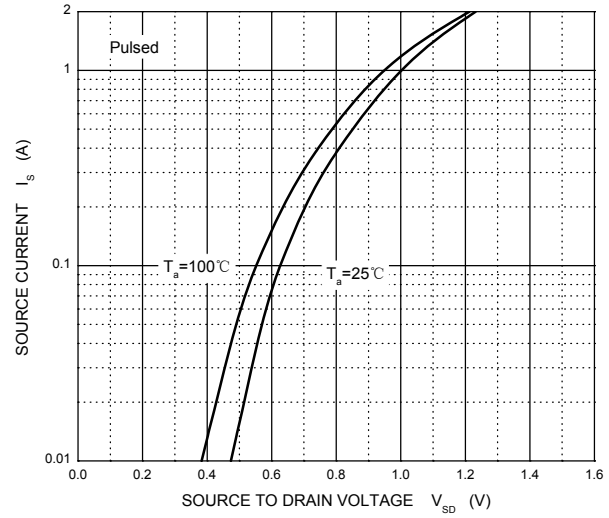
$R_{DS(ON)}$ —— I_D



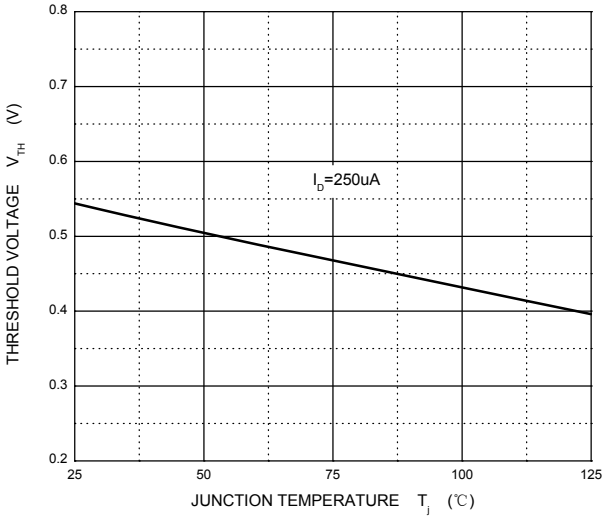
$R_{DS(ON)}$ —— V_{GS}



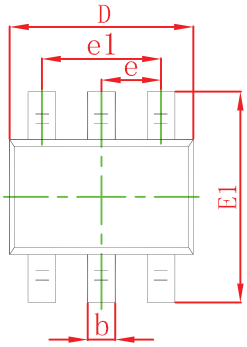
I_S —— V_{SD}

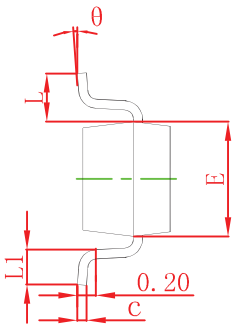


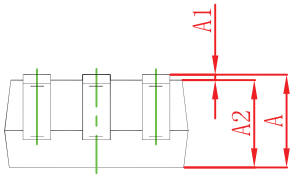
Threshold Voltage



SOT-363 Package Outline Dimensions

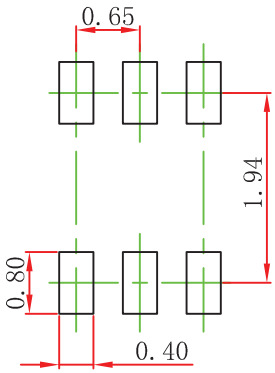






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



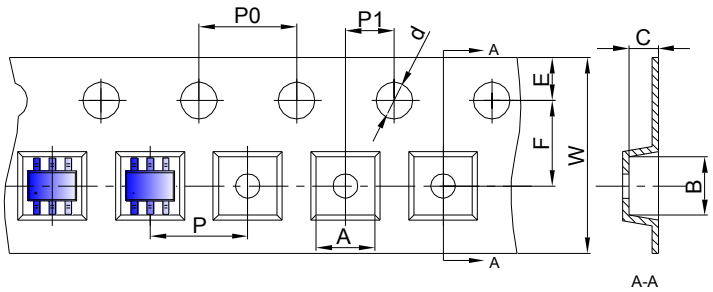
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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-363 Tape and Reel

SOT-363 Embossed Carrier Tape

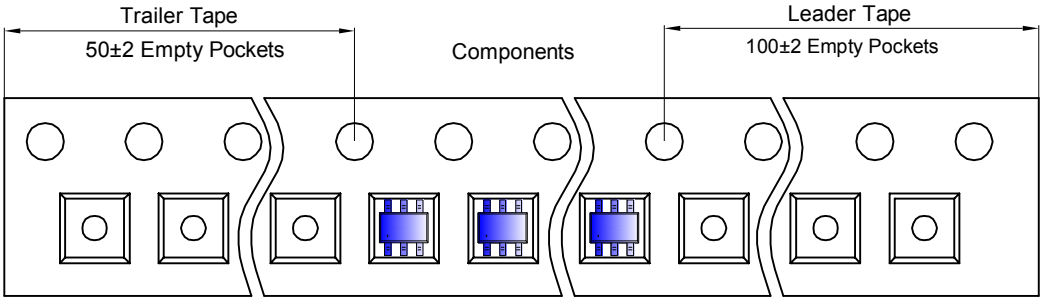


Packaging Description:

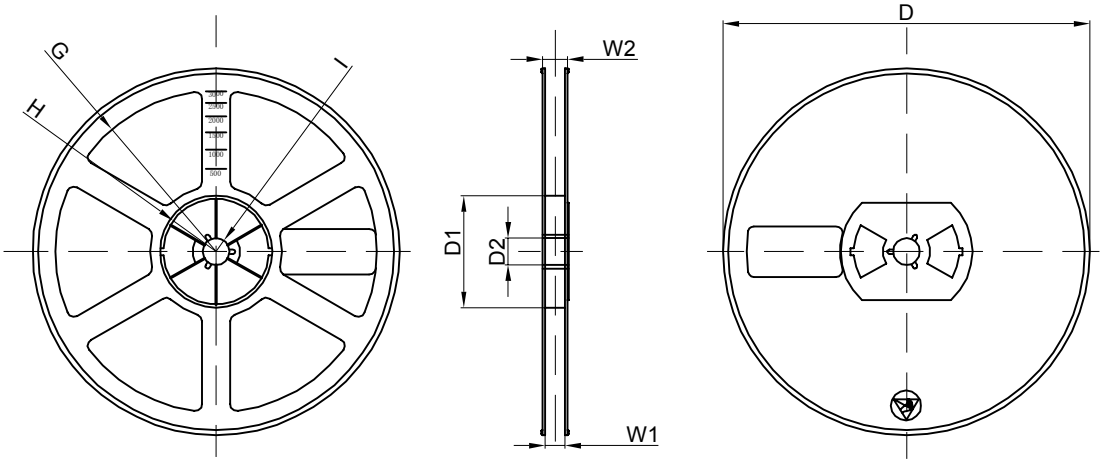
SOT-363 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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

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	