



SIL2623

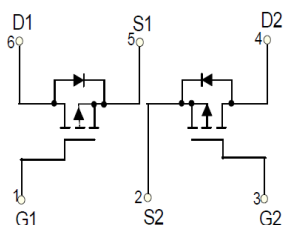
Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking Code: 2623

Maximum Ratings @ 25°C Unless Otherwise Specified

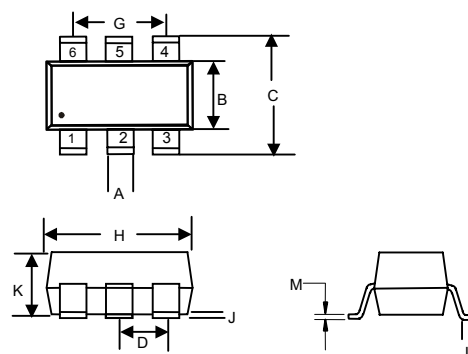
Symbol	Parameter	Rating	Unit
V_{DS}	Drain-source Voltage	-30	V
I_D	Drain Current-Continuous	-3.0	A
I_{DM}	Pulsed Drain Currents	-20	A
V_{GS}	Gate-source Voltage	± 20	V
P_D	Power Dissipation	0.35	W
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	357	°C/W
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Equivalent Circuit



Dual P-Channel Enhancement Mode Field Effect Transistor

SOT23-6L



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.012	.020	0.30	0.50	
B	.051	.070	1.30	1.80	
C	.087	.126	2.20	3.20	
D	.037		0.95BSC		
G	.074		1.90BSC		
H	.106	.122	2.70	3.10	
J	.002	.006	0.05	0.15	
K	.035	.051	0.90	1.30	
L	.012	.024	0.30	0.60	
M	.003	.008	0.08	0.22	

MOSFET ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

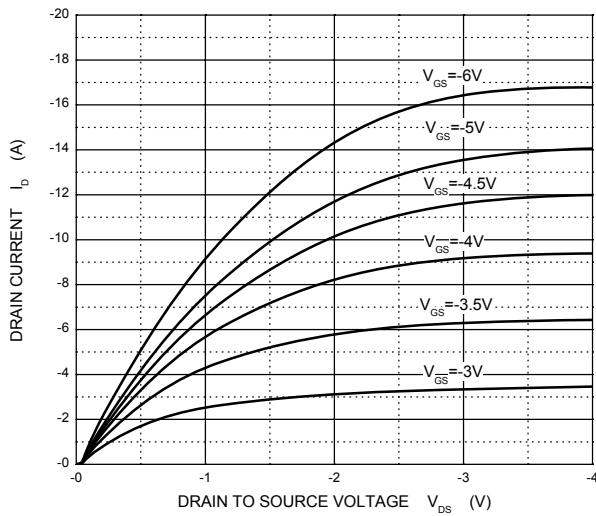
Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Static characteristics						
Drain-source breakdown voltage	BV _{DSS}	V _{GS} = 0V, I _D =-250μA	-30			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =-30V, V _{GS} = 0V			-1	μA
Gate-source leakage current	I _{GSS}	V _{GS} =±20V, V _{DS} = 0V			±100	nA
Drain-source on-resistance (note 1)	R _{DS(on)}	V _{GS} =-10V, I _D =-3.0A			130	mΩ
		V _{GS} =-4.5V, I _D =-2.0A			180	mΩ
Forward tranconductance (note 1)	g _{FS}	V _{DS} =-5V, I _D =-2A		2.0		S
Gate threshold voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250μA	-1		-3	V
Diode forward voltage (note 1)	V _{SD}	I _S =-1A, V _{GS} =0V			-1.2	V
Dynamic characteristics (note 2)						
Input capacitance	C _{iss}	V _{DS} =-25V, V _{GS} =0V, f =1MHz			240	pF
Output capacitance	C _{oss}			42		pF
Reverse transfer capacitance	C _{rss}			32		pF
Switching Characteristics (note 2)						
Turn-on delay time	t _{d(on)}	V _{GS} =-10V, V _{DD} =-15V, I _D =-1A, R _D =15Ω, R _G =3.3Ω		5		ns
Turn-on rise time	t _r			6		ns
Turn-off delay time	t _{d(off)}			15		ns
Turn-off fall time	t _f			3		ns
Total Gate Charge	Q _g	V _{DS} =-24V, V _{GS} =-4.5V, I _D =-2A			4.5	nC
Gate-Source Charge	Q _{gs}			0.5		nC
Gate-Drain Charge	Q _{gd}			1.4		nC

Notes:

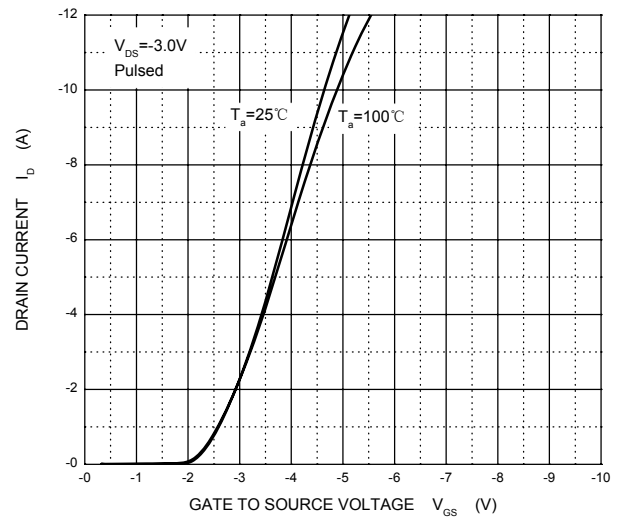
1. Pulse test: Pulse width ≤ 300μs, duty cycle ≤ 2%.
2. These parameters have no way to verify.

Typical characteristics

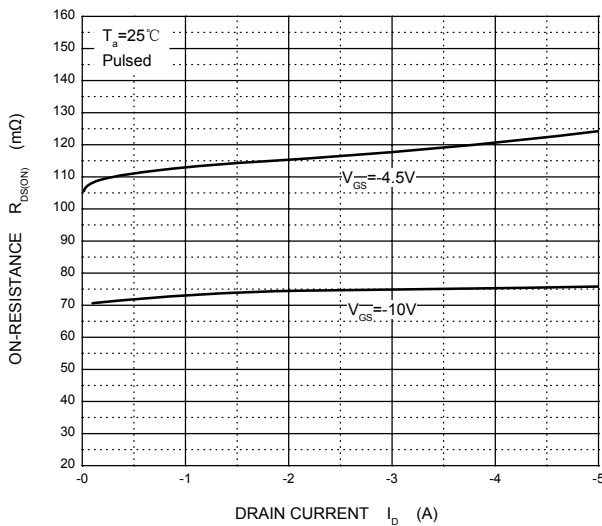
Output Characteristics



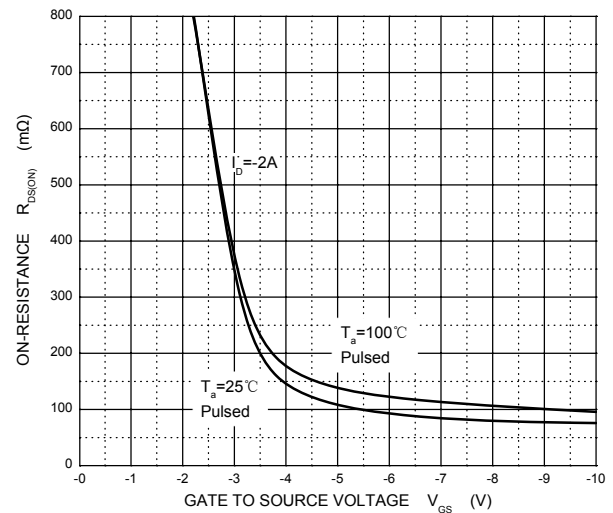
Transfer Characteristics



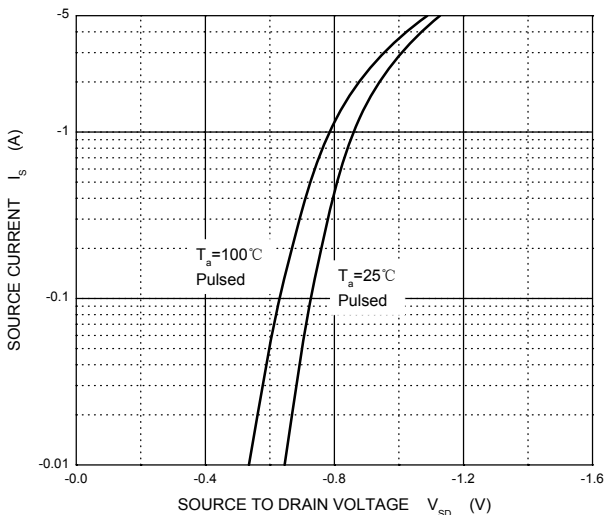
$R_{DS(ON)}$ — I_D



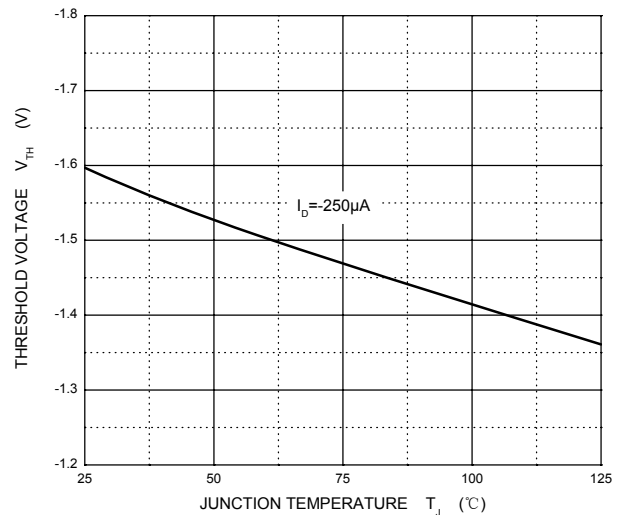
$R_{DS(ON)}$ — V_{GS}



I_S — V_{SD}



Threshold Voltage



Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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