



**THE DATASHEET OF
SIL2623-TP**



Features

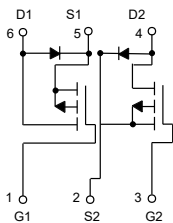
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range : -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 357°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	-3	A
Pulsed Drain Current	I_{DM}	-20	A
Power Dissipation	P_D	0.35	W

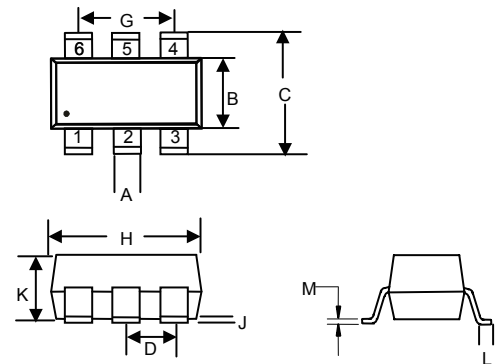
Internal Structure



Marking:2623

**Dual
P-Channel
MOSFET**

SOT23-6L



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.012	0.020	0.30	0.50	
B	0.051	0.070	1.30	1.80	
C	0.087	0.126	2.20	3.20	
D	0.037		0.95		TYP.
G	0.074		1.90		TYP.
H	0.106	0.122	2.70	3.10	
J	0.002	0.006	0.05	0.15	
K	0.030	0.051	0.75	1.30	
L	0.012	0.024	0.30	0.60	
M	0.003	0.008	0.08	0.22	

Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Static Characteristics						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=-250\mu A$	-30			V
Gate-Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=-250\mu A$	-1		-3	V
Gate-Body Leakage Current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$			± 100	nA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 20V, V_{GS} = 0V$			1	μA
Drain-Source On-Resistance ^(Note 1)	$R_{DS(on)}$	$V_{GS}=10V, I_D=-3A$			130	m Ω
		$V_{GS}=-4.5V, I_D=2A$			180	
Forward Transconductance ^(Note 1)	g_{FS}	$V_{DS}=-5V, I_D=-2A$		2		S
Diode Forward Voltage ^(Note 1)	V_{SD}	$V_{GS}=0V, I_S=1A$			-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		
Reverse Transfer Capacitance	C_{rss}			32		
Switching Characteristics^(Note 2)						
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=-15V, V_{GS}=-10V, R_D=15\Omega, I_D=-1A, R_G=3.3\Omega$		5		ns
Turn-On Rise Time	t_r			6		
Turn-Off Delay Time	$t_{d(off)}$			15		
Turn-Off Fall Time	t_f			3		
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		
Gate-Drain Charge	Q_{gd}			1.4		

Note:

1. Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$.
2. These Parameters Have No Way To Verify.

Curve Characteristics

Fig. 1 - Output Characteristics

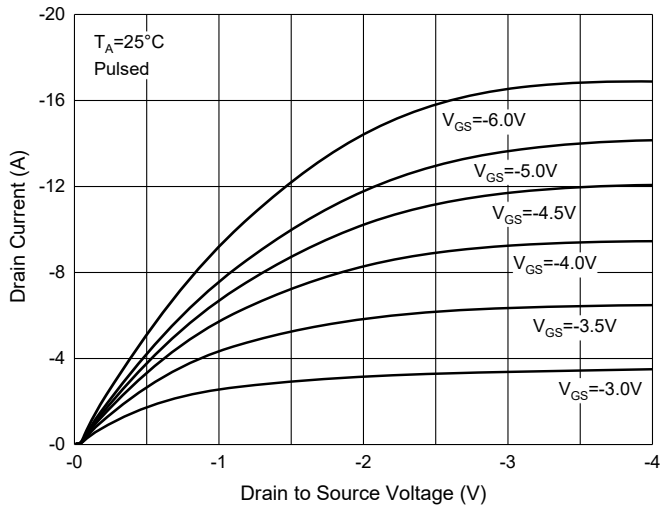


Fig. 2 - Transfer Characteristics

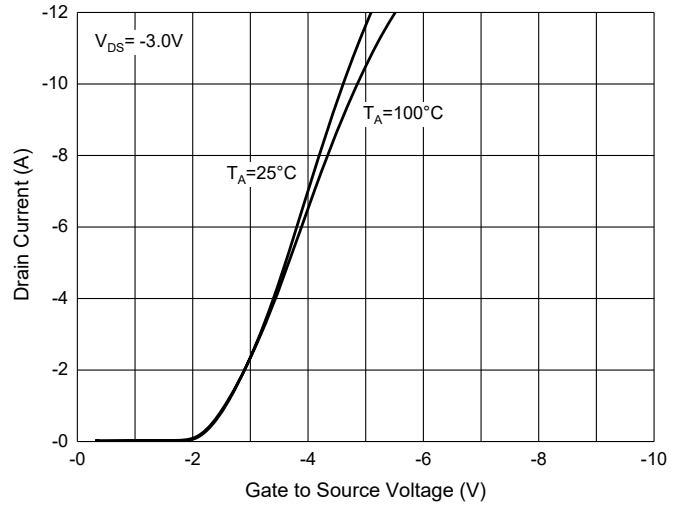


Fig. 3 - $R_{DS(ON)} - I_D$

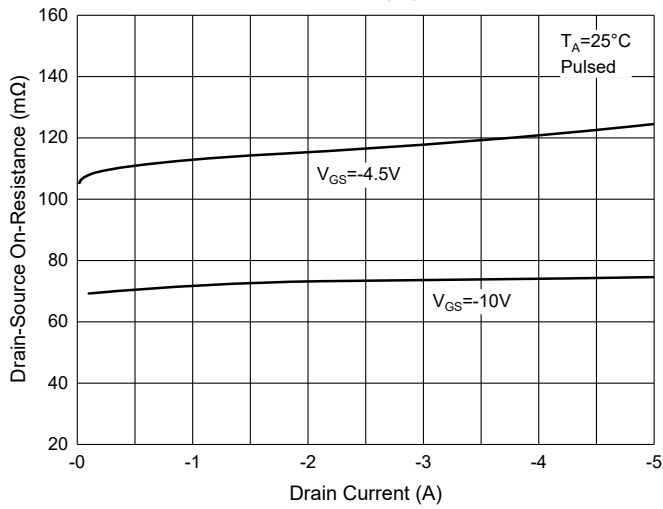


Fig. 4 - $R_{DS(ON)} - V_{GS}$

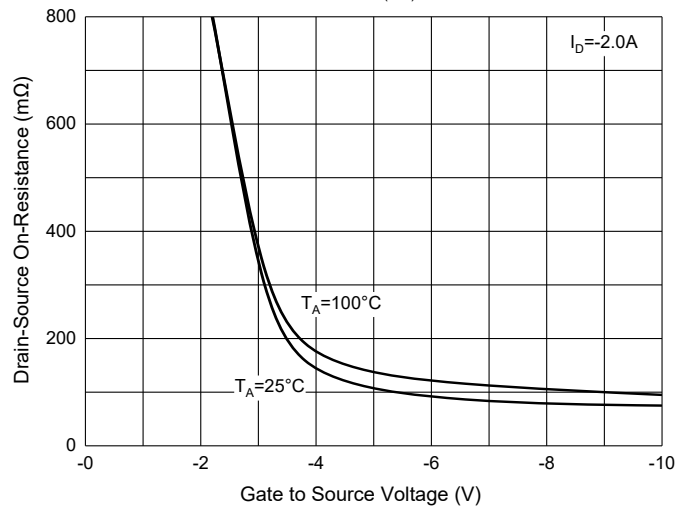


Fig. 5 - $I_S - V_{SD}$

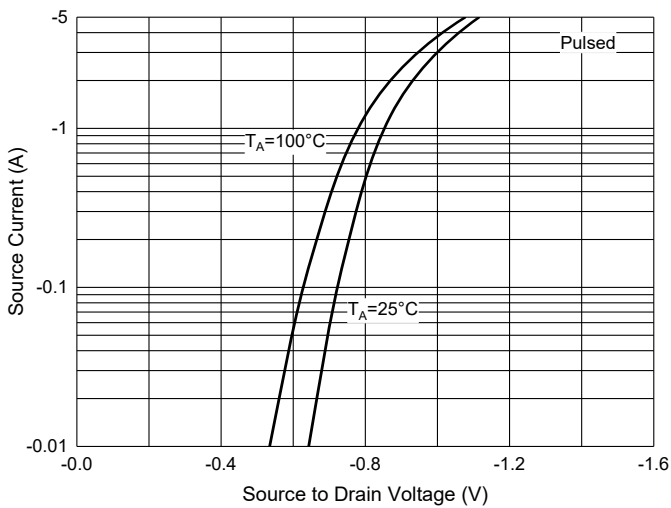
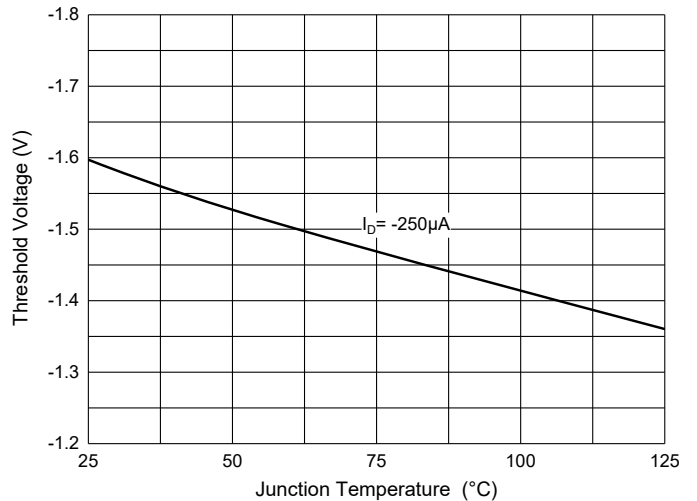


Fig. 6 - Threshold Voltage



Ordering Information

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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