

/ Descriptions

SOT-23 N MOS - CHANNEL MOSFET in a SOT-23 Plastic Package.

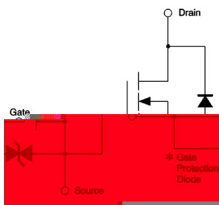
/ Features

Low on-resistance, fast switching speed, low voltage drive, easily designed drive circuits, easy to parallel. ESD protected up to 500V

/ Applications

Interfacing, switching.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 S PIN 3 D

/ Marking

Marking	KL
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Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Gate-Source Voltage	V_{GSS}	± 20	V
Drain Current – Continuous	I_D	100	mA
Drain Current- Pulsed	I_{DP}^{*1}	400	mA
Reverse Drain Current – Continuous	I_{DR}	100	mA
Reverse Drain Current –Pulsed	I_{DRP}^{*1}	200	mA
Total Power Dissipation	P_D^{*2}	250	mW
Channel Temperature	T_{ch}	150	V
Storage Temperature Range	T_{stg}	-55 150	

*1: P_w 10 s, Duty cycle 1%

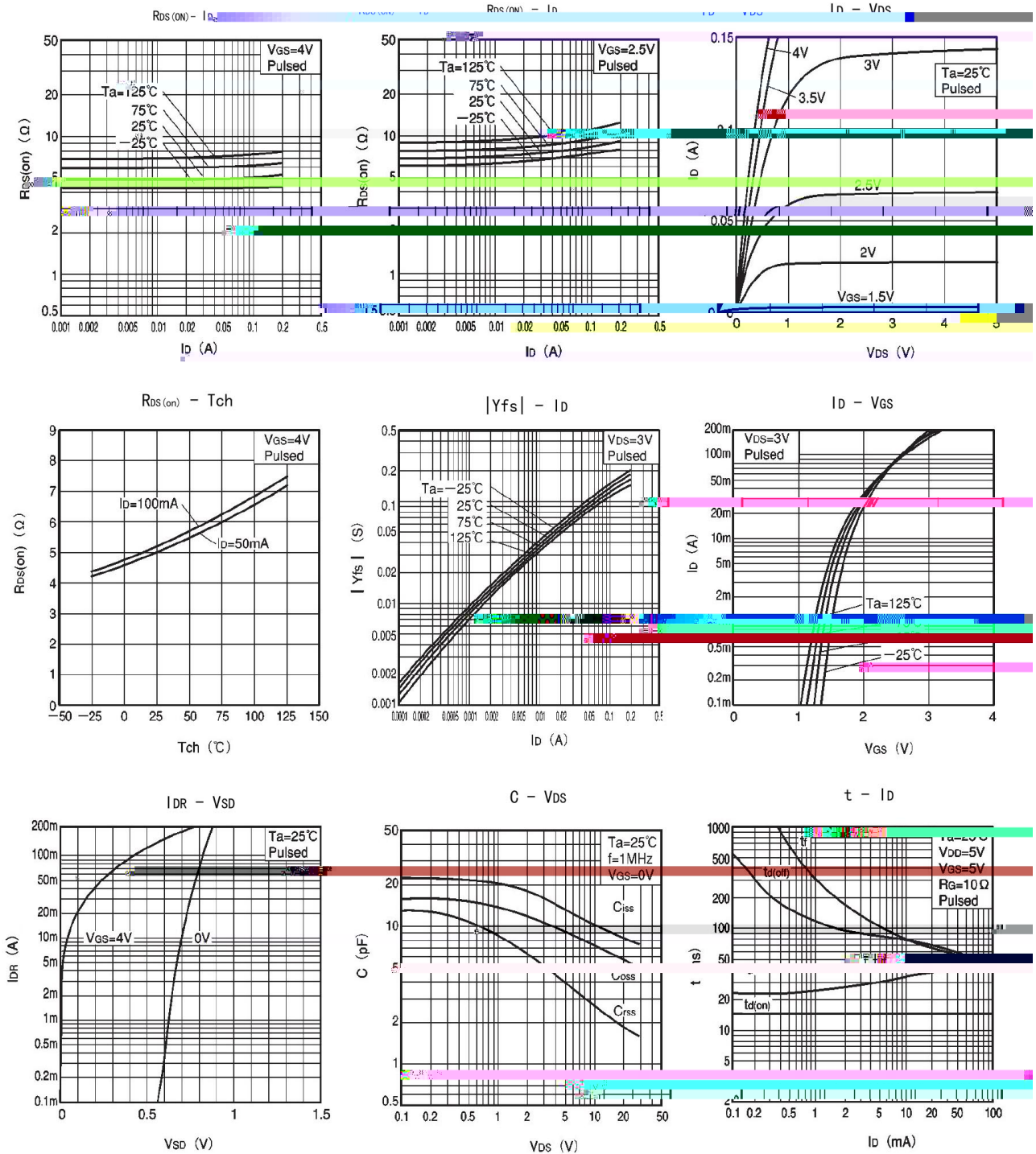
*2: With each pin mounted on the recommended lands

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V$ $I_D=10$ A	30			V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=3.0V$ $I_D=100$ A	0.8		1.5	V

Static Drain–Source
On–Resistance

R on the recomm248 T2 0 8(on t0 6 Twa(on)10 7.02 282.36 372.5603 Tm49

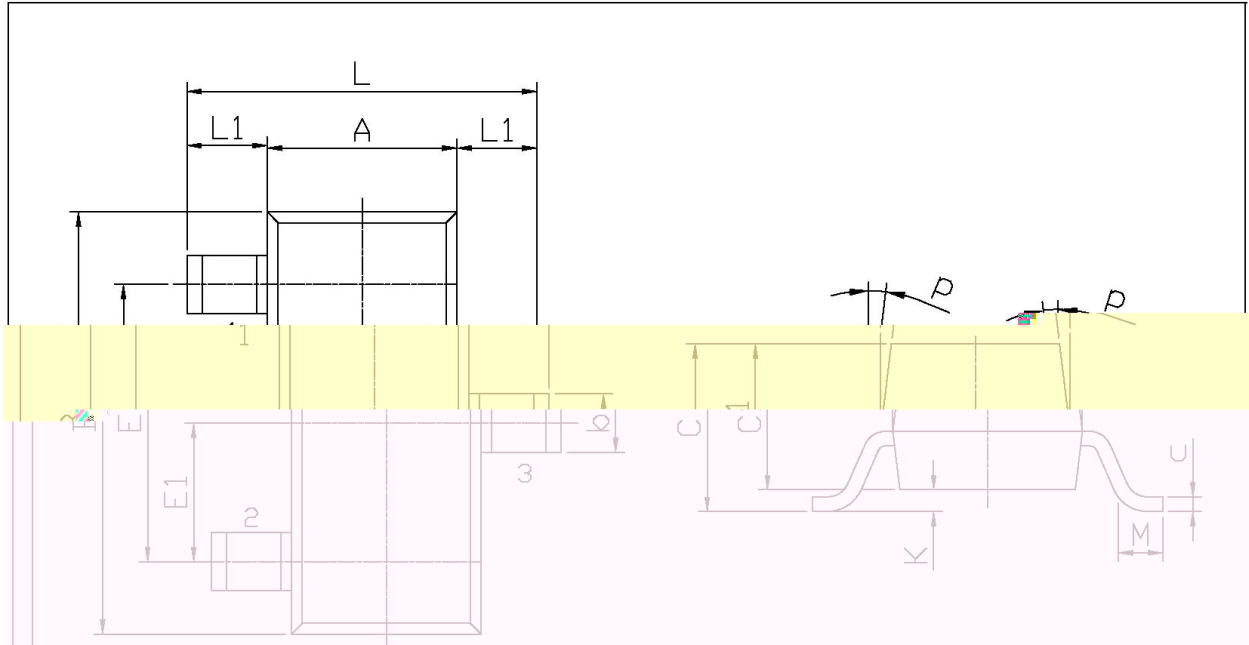
/ Electrical Characteristic Curve



/ Package Dimensions

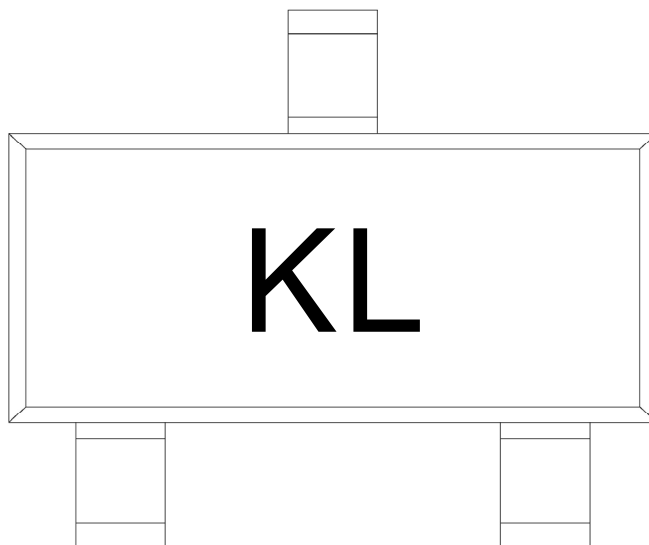
SOT-23

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
R	2.70	3.40			

/ Marking Instructions

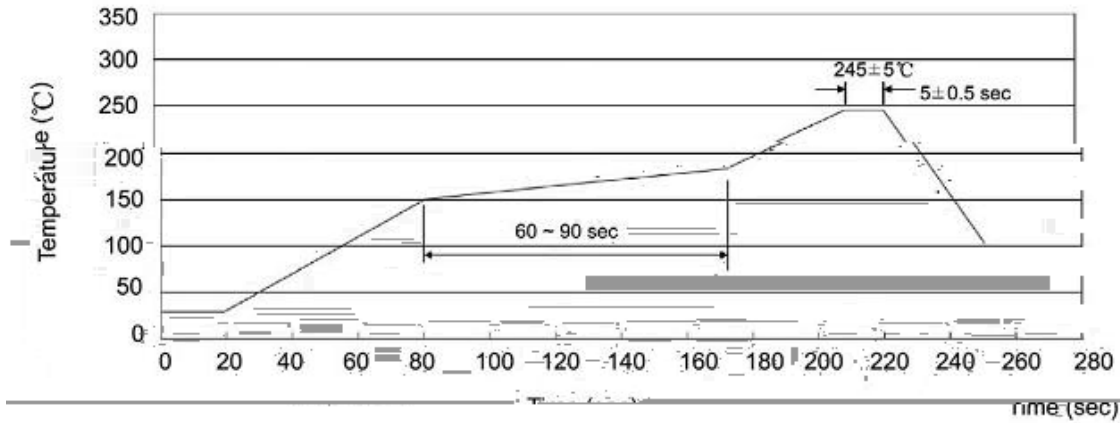


KL:

Note:

KL Package Type

() / Temperature Profile for IR Reflow Soldering (Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245 | 5 | 5 | 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260 5 Time:10 1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices