

/ Descriptions

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

/ Features

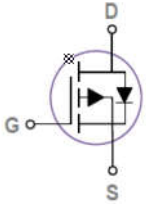
MOSFET
Trench Power MOSFET technology, Low $R_{DS(ON)}$, Low Gate Charge, HF Product.

/ Applications

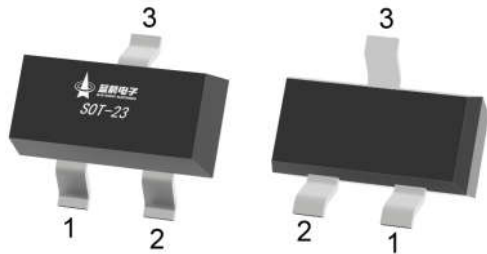
Primarily the display screen drive applications.

/ Equivalent Circuit

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/ Pinning



PIN1 G PIN 2 S PIN 3 D

/ Marking

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Marking	H305
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Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-20	V
Gate-Source Voltage		V_{GS}	± 12	V
Drain Current – Continuous		$I_D(T_C=25^\circ\text{C})$	-4.3	A
Pulsed Drain Current		I_{DM}	-18	A
Power Dissipation		P_D	1.3	W
Operating and Storage Temperature Range		T_J, T_{stg}	-55 to 150	$^\circ\text{C}$
Junction-to-Ambient	$t \leq 10$	R_{JA}	90	$^\circ\text{C/W}$
Junction-to-Ambient	Steady-State		125	
Junction-to-Lead	Steady-State	R_{JL}	80	

Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V$	$I_D=-200\mu A$	-20	-23	V
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Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS} = -4.5V$ $V_{DS} \leq$		sbr	ec:	

/ Electrical Characteristic Curve

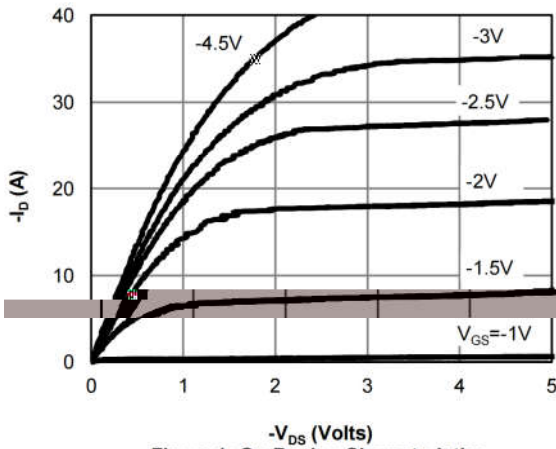


Figure 1: On-Region Characteristics

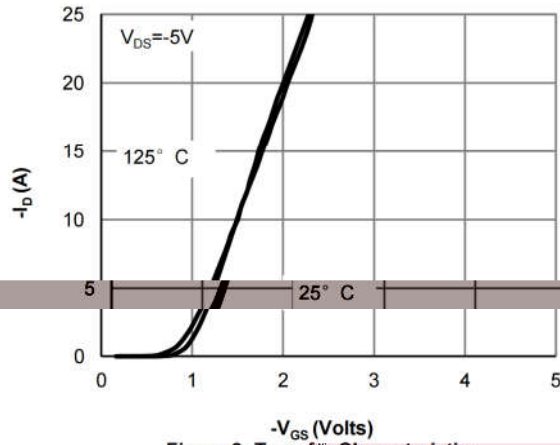


Figure 2: Transfer Characteristics

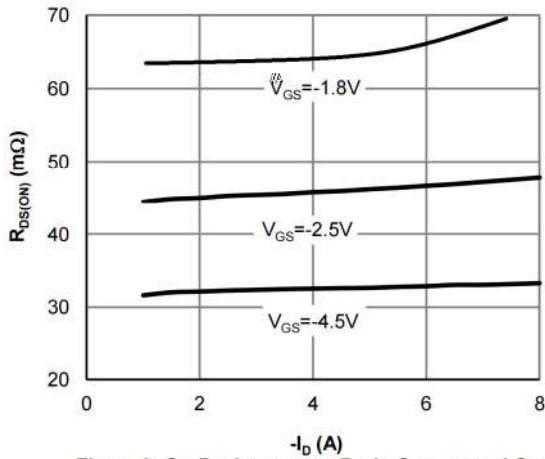


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

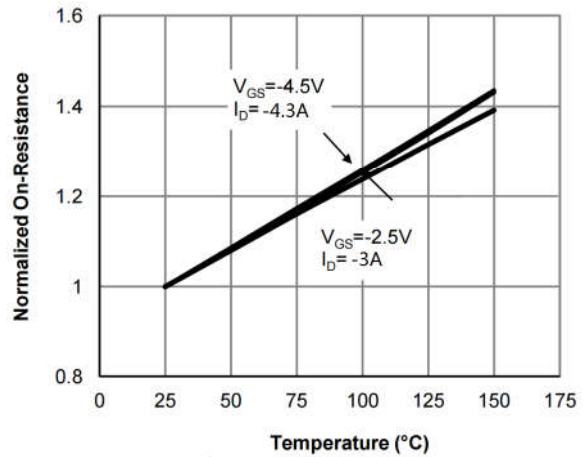


Figure 4: On-Resistance vs. Junction Temperature

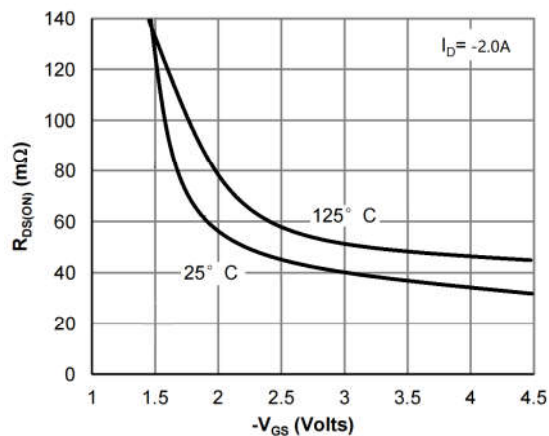


Figure 5: On-Resistance vs. Gate-Source Voltage

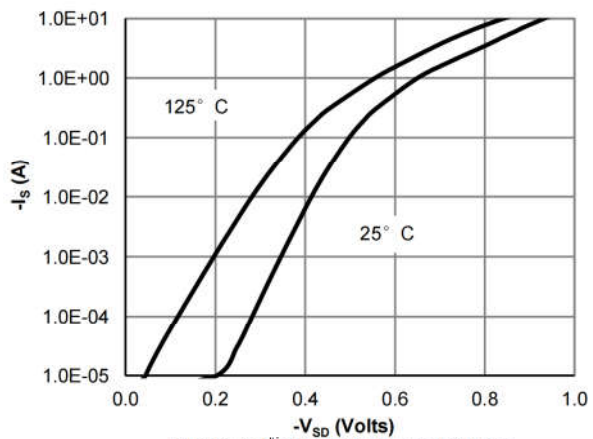


Figure 6: Body-Diode Characteristics

/ Electrical Characteristic Curve

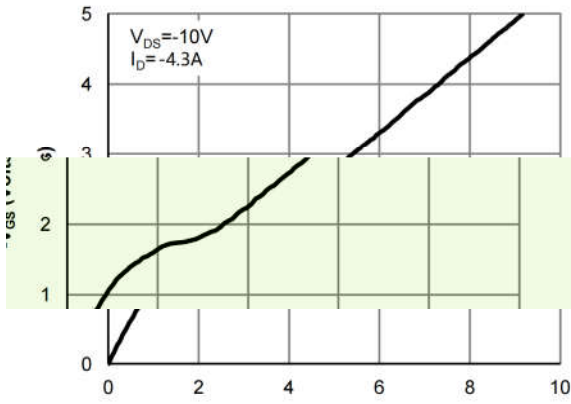


Figure 7: Total Charge Characteristics

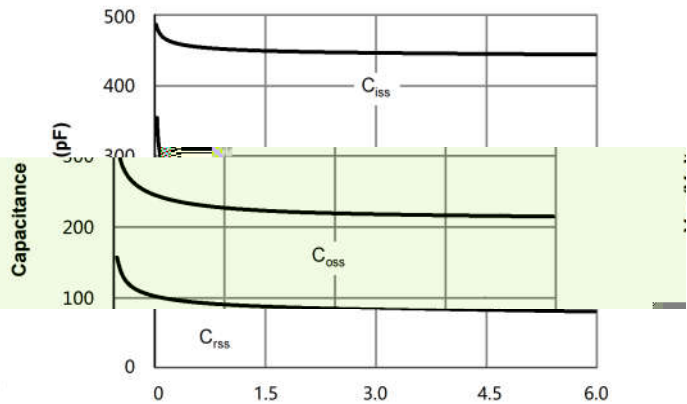


Figure 8: Capacitance Characteristics

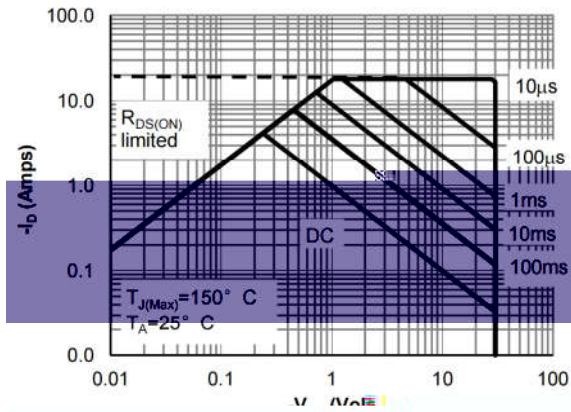


Figure 9: Power Characteristics

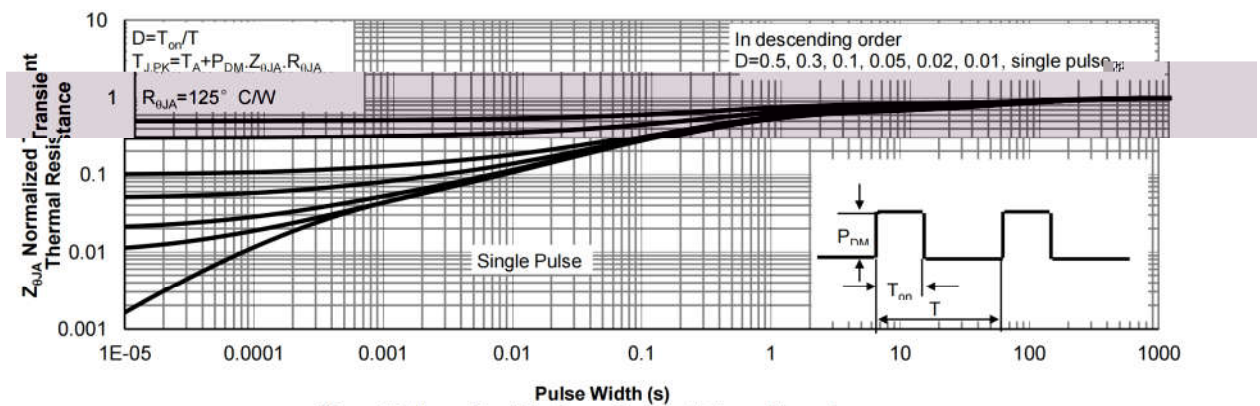
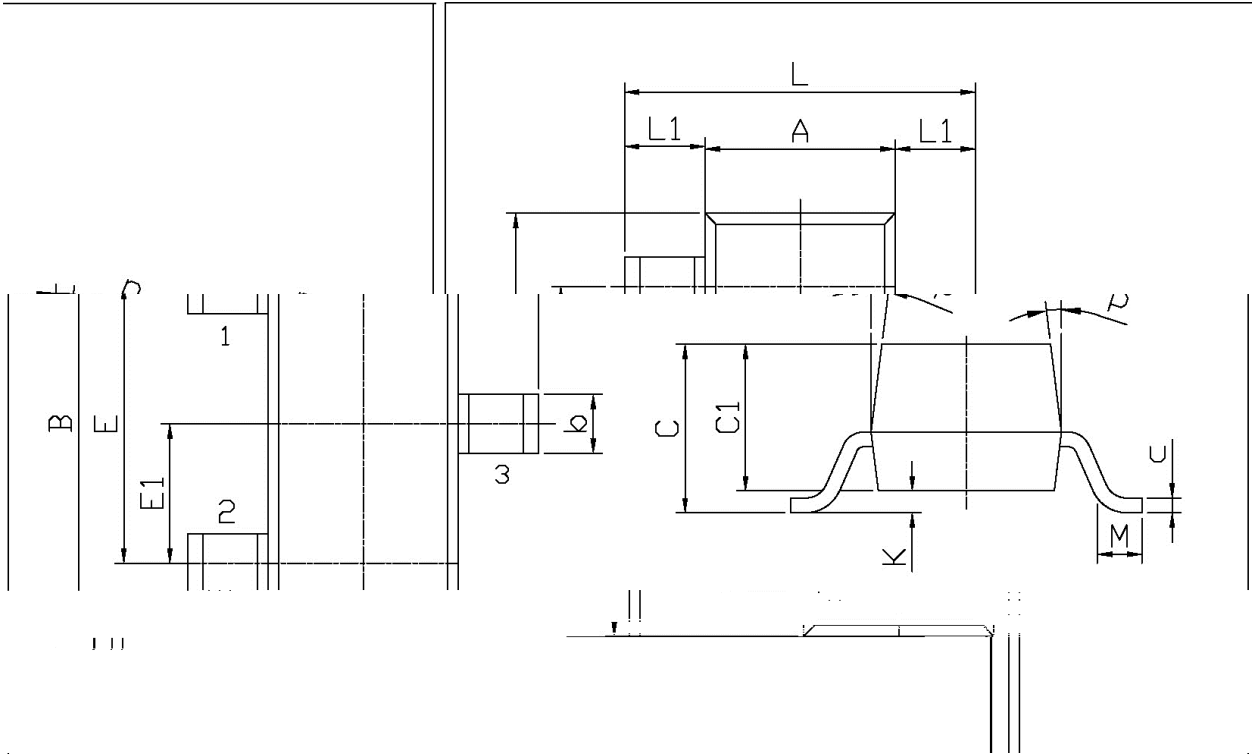


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

SCOT-23

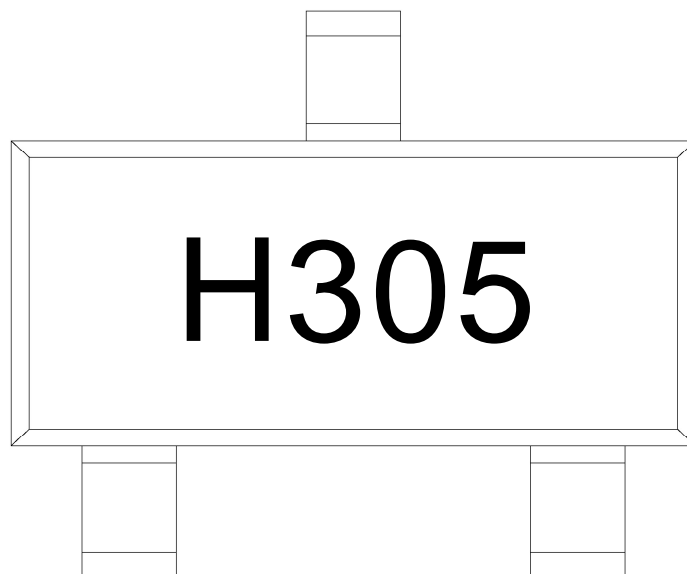
单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
E	1.30	Max	E	2.2	2.7
E1	0.90	1.20	E1	0.45	0.65
b	0.05	0.20	A	1.15	1.50
C	0	0.10	P	0.20	0.30
			φ	0.35	0.55

/ Marking Instructions

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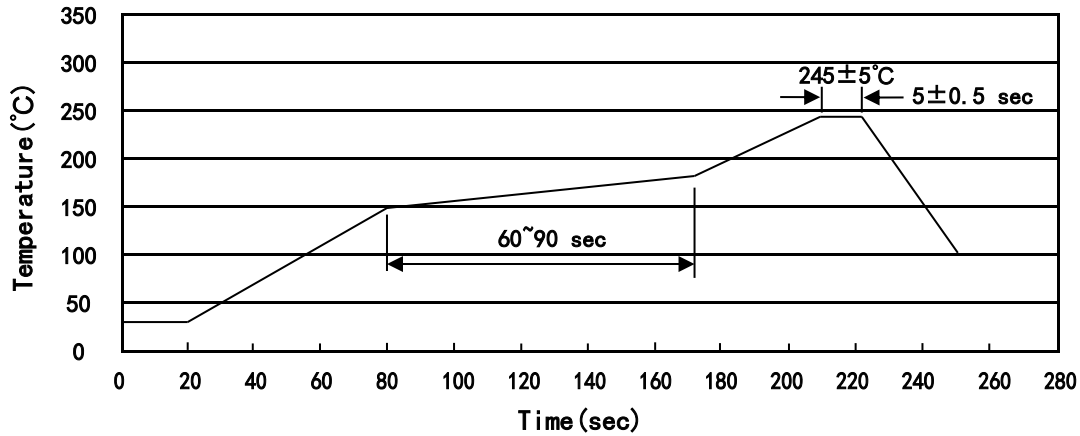
305:

Note:

H: Company Code.

305 Product Type

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Note:

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|---|-----|-----|----|---------|---|
| 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" x8	180x120x180	390x385x205

/ Notices