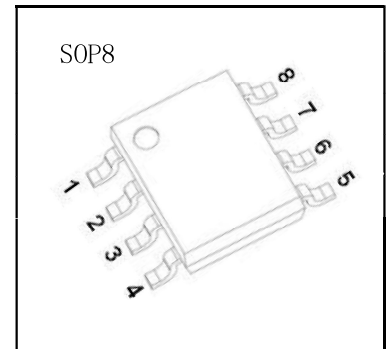


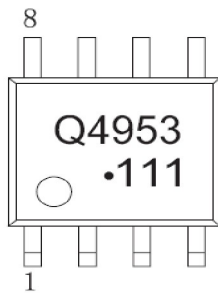
SOP8 Plastic-Encapsulate MOSFETS

SEQ4953 P-Channel 30-V(D-S) MOSFET

$V_{(BR)DSS}$	$R_{DS(on) MAX}$	I_D
-30V	60mΩ@-10V	-5A
	90mΩ @4.5V	

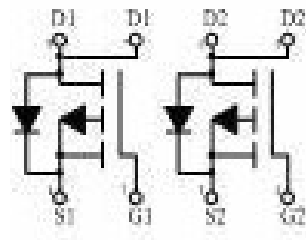


MARKING:



Solid dot = Green molding compound device
if none, the normal device

Equivalent Circuit



Maximum ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current ($t \leq 10s$)	I_D	-5	A
Power Dissipation ($t \leq 10s$)	P_D	1.25	W
Thermal Resistance from Junction to Ambient ($t \leq 10s$)	$R_{\theta JA}$	100	$^{\circ}\text{C/W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	

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MOSFET ELECTRICAL CHARACTERISTICS

$T_a = 25\text{ }^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Static						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = -250\mu A$	-30			V
Gate-threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-1.0			V
Gate-body leakage	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 20V$			± 100	nA
Zero gate voltage drain current	I_{DSS}	$V_{DS} = -30V, V_{GS} = 0V$			-1	μA
Drain-source on-resistance ^a	$R_{DS(on)}$	$V_{GS} = -10V, I_D = -4.9A$			60	m Ω
		$V_{GS} = -4.5V, I_D = -3.7A$			90	
Forward transconductance ^a	g_{fs}	$V_{DS} = -10V, I_D = -4.9A$	6.0			S
Diode forward voltage ^a	V_{SD}	$I_S = -1.7A, V_{GS} = 0V$			-1.2	V
Dynamic^b						
Total gate charge	Q_g	$V_{DS} = -15V, V_{GS} = -10V, I_D = -4.9A$			25	nC
Gate-source charge	Q_{gs}			4		
Gate-drain charge	Q_{gd}			2		
Turn-on delay time	$t_{d(on)}$	$V_{DD} = -15V, R_L = 15\Omega, I_D \approx -1A,$ $V_{GEN} = -10V, R_G = 6\Omega$			15	nS
Rise time	t_r				20	
Turn-off delay time	$t_{d(off)}$				80	
Fall time	t_f				40	

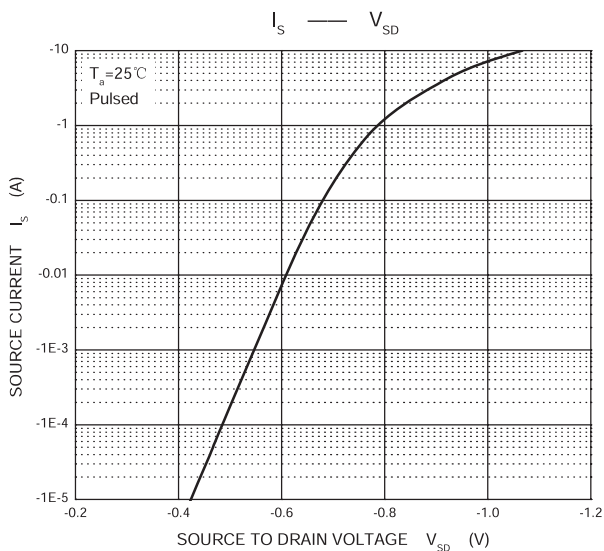
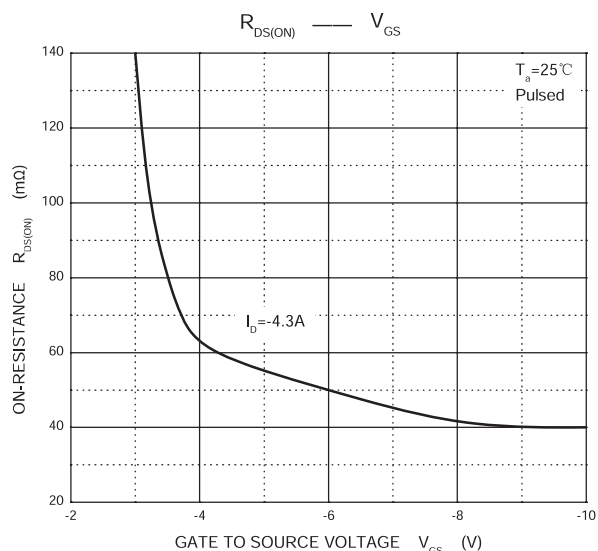
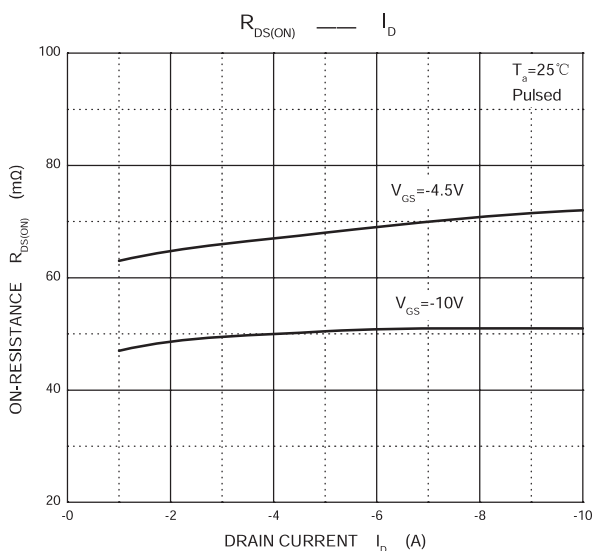
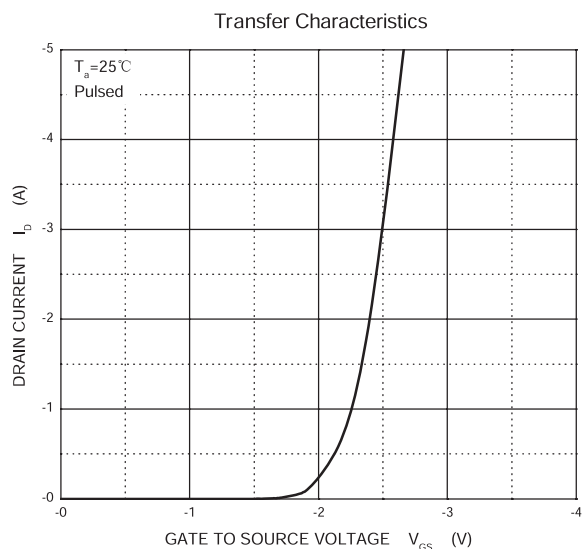
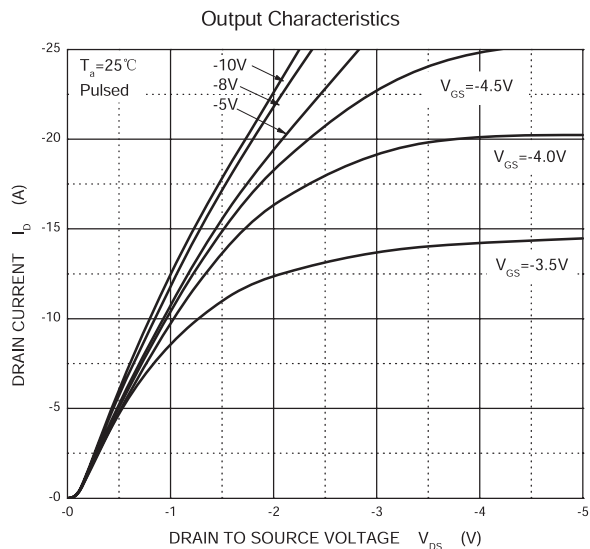
Notes :

- Pulse Test : Pulse width $\leq 300\mu s$, duty cycle $\leq 2\%$.
- Guaranteed by design, not subject to production testing.



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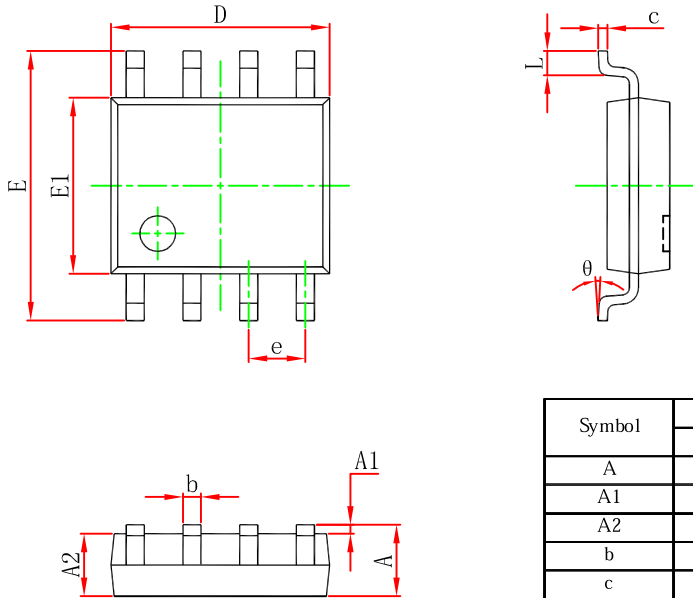
Typical Characteristics





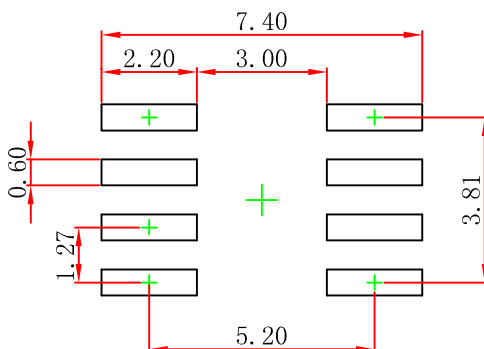
SOP8 Plastic-Encapsulate MOSFETS

SOP8 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.007	0.010
D	4.800	5.000	0.189	0.197
e	1.270 (BSC)		0.050 (BSC)	
E	5.800	6.200	0.228	0.244
E1	3.800	4.000	0.150	0.157
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°

SOP8 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



SOP8 Plastic-Encapsulate MOSFETS

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 2.5 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G"; Halogen free product for packing code suffix "H"

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