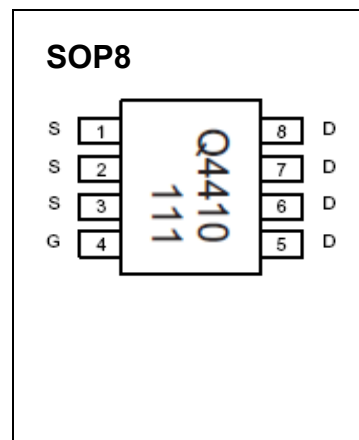
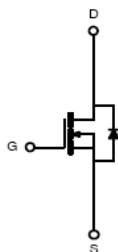


SOP8 Plastic-Encapsulate MOSFETS

CJQ4410 N-Channel MOSFET

APPLICATIONS

- Battery Switch
- Load Switch



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

Parameter	Symbol	Value	Units
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current (note 1)	I_D	7.5	A
Pulsed Drain Current (10 μ s Pulse Width)	I_{DM}	50	
Drain-Source Diode Forward Current (t =10s) (note 1)	I_S	1.26	
Power Dissipation (note 1)	P_D	1.4	W
Thermal Resistance from Junction to Ambient (t \leq 10s) (note 1)	$R_{\theta JA}$	89.3	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	

Electrical characteristics (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static Characteristics						
Drain Source Breakdown Voltage	V _{(BR)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 body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	1.0		3.0	V
Drain-Source on-state Resistance (note 2)	R _{DS(on)}	V _{GS} =10V, I _D =10A			13.5	mΩ
		V _{GS} =4.5V, I _D =5A			20	
Forward Transconductance (note 2)	g _{fs}	V _{DS} =15V, I _D =5A				S
Diode Forward Voltage (note 2)	V _{SD}	I _S =2.3A, V _{GS} =0V			1.1	V
Dynamic Characteristics (note 3)						
Gate Charge	Q _g	V _{DS} =15V, V _{GS} =5V, I _D =10A			20	nC
Total Gate Charge	Q _{gt}	V _{DS} =15V, V _{GS} =10V, I _D =10A			40	
Gate-Source Charge	Q _{gs}			5.5		
Gate-Drain Charge	Q _{gd}			3.7		
Gate Resistance	R _g	f =1MHz	0.5		2.7	Ω
Turn-On Delay Time	t _{d(on)}	V _{DD} =25V, R _L =25Ω, I _D ≈1A, V _{GEN} =10V, R _G =6Ω			15	ns
Rise Time	t _r				15	
Turn-Off Delay Time	t _{d(off)}				60	
Fall Time	t _f				25	

Notes:

1. Surface mounted on 1"×1" FR4 board.
2. Pulse Test : Pulse Width≤300μs, Duty Cycle ≤2%.
3. Guaranteed by design, not subject to production testing.

CJQ4410

