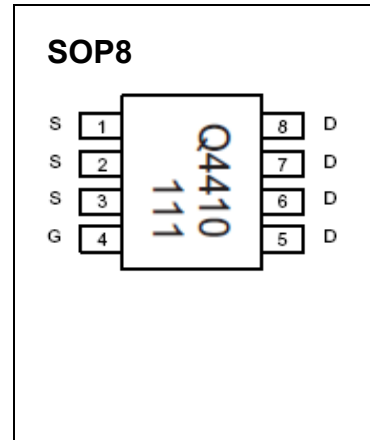
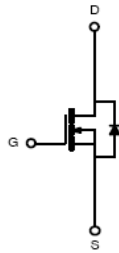


SOP8 Plastic-Encapsulate MOSFETS

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static Characteristics						
Drain Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=250\mu A$	30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V, V_{GS}=0V$			1	μA
Gate body Leakage	I_{GSS}	$V_{DS}=0V, V_{GS}=\pm 20V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	1.0		3.0	V
Drain-Source on-state Resistance (note 2)	$R_{DS(on)}$	$V_{GS}=10V, I_D=10A$			13.5	m Ω
		$V_{GS}=4.5V, I_D=5A$			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}				40	
Gate-Source Charge	Q_{gs}	$V_{DS}=15V, V_{GS}=10V, I_D=10A$		5.5		
Gate-Drain Charge	Q_{gd}			3.7		
Gate Resistance	R_g	$f=1\text{MHz}$	0.5		2.7	Ω
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=25V, R_L=25\Omega, I_D \approx 1A,$ $V_{GEN}=10V, R_G=6\Omega$			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≤300 μs , Duty Cycle ≤2%.
3. Guaranteed by design, not subject to production testing.

