

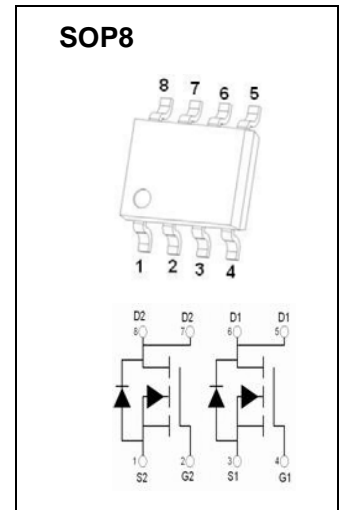
SOP8 Plastic-Encapsulate MOSFETS

CJQ9926 Dual N-Channel MOSFET

FEATURE

- Advanced trench process technology
- High density cell design for ultra low on-resistance
- High power and current handing capability
- Ideal for Liion battery pack applications

MARKING: Q9926



Maximum ratings (T_a=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source voltage	V _{DS}	20	V
Gate-Source Voltage	V _{GS}	±12	V
Continuous Drain Current *	I _D	4.8	A
Pulsed Drain Current	I _{DM}	30	A
Power Dissipation *	P _D	1.25	W
Thermal Resistance from Junction to Ambient *	R _{θJA}	100	°C/ W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

* Surface Mounted on 1" x 1" FR4 Board.

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	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	20			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = 20V, V_{GS} = 0V$			1	μA
Gate-body leakage current	I_{GSS}	$V_{GS} = \pm 12V, V_{DS} = 0V$			± 100	nA
Gate threshold voltage (note 1)	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\mu A$	0.6		1.2	V
Drain-source on-resistance (note 1)	$R_{DS(on)}$	$V_{GS} = 2.5V, I_D = 5A$			40	m Ω
		$V_{GS} = 4.5V, I_D = 6A$			30	m Ω
Forward transconductance (note 1)	g_{FS}	$V_{DS} = 15V, I_D = 6A$	15			S
SWITCHING CHARACTERISTICS (note 2)						
Turn-on delay time	$t_{d(on)}$	$V_{GEN}=4.5V, V_{DD}=15V,$ $R_{GEN}=6\Omega, I_D = 1A, R_L=15\Omega$			35	ns
Turn-on rise time	t_r				60	ns
Turn-off delay time	$t_{d(off)}$				75	ns
Turn-off fall time	t_f				30	ns
Total gate charge	Q_g	$V_{DS} = 15V, V_{GS} = 4.5V, I_D = 6A$			20	nC
Gate-source Charge	Q_{gs}			3		nC
Gate-drain Charge	Q_{gd}			3.3		nC
SOURCE-DRAIN DIODE CHARACTERISTICS						
Maximum diode forward current	I_S				1	A
Diode forward voltage (note 1)	V_{SD}	$I_S=1.7A, V_{GS}=0V$			1.2	V
Source-Drain Reverse Recovery Time	t_{rr}	$I_F = 1.7 A, di/dt = 100 A/\mu s$			80	ns

Notes :

1. Pulse Test : Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$.
2. Guaranteed by design, not subject to production

