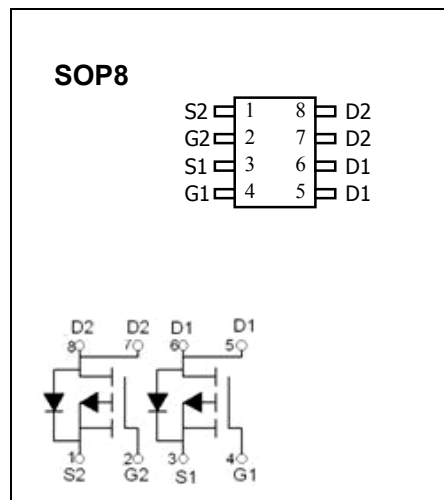


## SOP8 Plastic-Encapsulate MOSFETS

### CJ4803A Dual P-Channel 30-V(D-S) MOSFET

#### DESCRIPTION

The CJ4803A uses advanced trench technology to provide excellent  $R_{DS(on)}$ . This device is suitable for use as a load switch or in PWM applications.



#### 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	$V_{GS}$	$\pm 20$	
Continuous drain current	$I_D$	-5	A
Pulsed drain current	$I_{DM}$	-30	
Maximum body- diode continuous current	$I_S$	-2	
Power dissipation	$P_D$	0.35	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	357	$^{\circ}\text{C}/\text{W}$
Junction temperature	$T_J$	150	$^{\circ}\text{C}$
Storage temperature	$T_{stg}$	-55 ~+150	

**Electrical characteristics (T<sub>a</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
Drain-source breakdown voltage	V <sub>(BR)DSS</sub>	V <sub>GS</sub> = 0V, I <sub>D</sub> = -250μA	-30			V
Gate-source leakage	I <sub>GSS</sub>	V <sub>DS</sub> = 0V, V <sub>GS</sub> = ±20V			±100	nA
Zero gate voltage drain current	I <sub>DSS</sub>	V <sub>DS</sub> = -30V, V <sub>GS</sub> = 0V			-1.0	μA
Gate-source threshold voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>D</sub> = -250μA	-1.5	-2	-2.5	V
Drain-source On-State resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> = -10V, I <sub>D</sub> = -5.0A		37	46	mΩ
		V <sub>GS</sub> = -4.5V, I <sub>D</sub> = -4A		60	74	
Forward diode voltage	V <sub>SD</sub>	V <sub>GS</sub> = 0V, I <sub>S</sub> = -1A		-0.77	-1	V
Forward transconductance	g <sub>FS</sub>	V <sub>DS</sub> = -5V, I <sub>D</sub> = -5A	10			S
DYNAMIC PARAMETERS						
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -15V, V <sub>GS</sub> = 0V, f = 1MHz	830			pF
Output capacitance	C <sub>oss</sub>			126		
Reverse transfer capacitance	C <sub>rss</sub>			92		
SWITCHING PARAMETERS						
Turn-on delay time	t <sub>d(on)</sub>	V <sub>GS</sub> = -10V, V <sub>DS</sub> = -15V, R <sub>L</sub> = 3Ω, R <sub>GEN</sub> = 3Ω		7.7		ns
Rise time	t <sub>r</sub>			6.8		
Turn-off delay time	t <sub>d(off)</sub>			20		
Fall time	t <sub>f</sub>			10		