



型号/TYPE: CS15N04

N 沟道增强型 MOS 管

N-Channel Enhancement mode Field Effect Transistor

主要特性/Features

开关速度快 Fast Switching

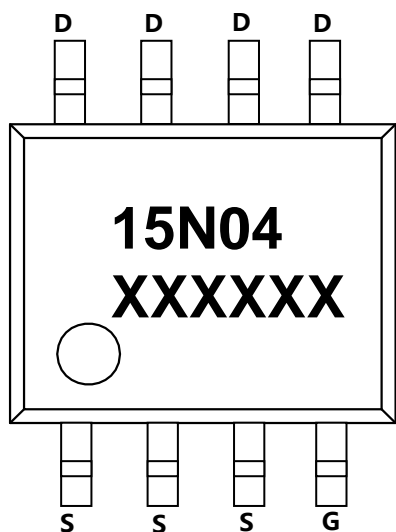
低导通电阻($R_{dson} \leq 10m\Omega$) Low ON Resistance ($R_{dson} \leq 10m\Omega$)

反向传输电容低(典型值 220pF) Low Reverse transfer capacitances(Typical:220pF)

应用/Application

暂无

印字/MARKING 引脚定义/pin definition





极限参数/ Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	40	V
Gate-Source Voltage	VGS	±20	V
Continuous Drain Current	ID	15	A
Pulsed Drain Current (note1)	IDM	60	A
Power Dissipation	PD (Ta=25°C)	3.1	W
Thermal Resistance Junction to Ambient(note2)	Rθ JA	40	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 ~ 150	°C

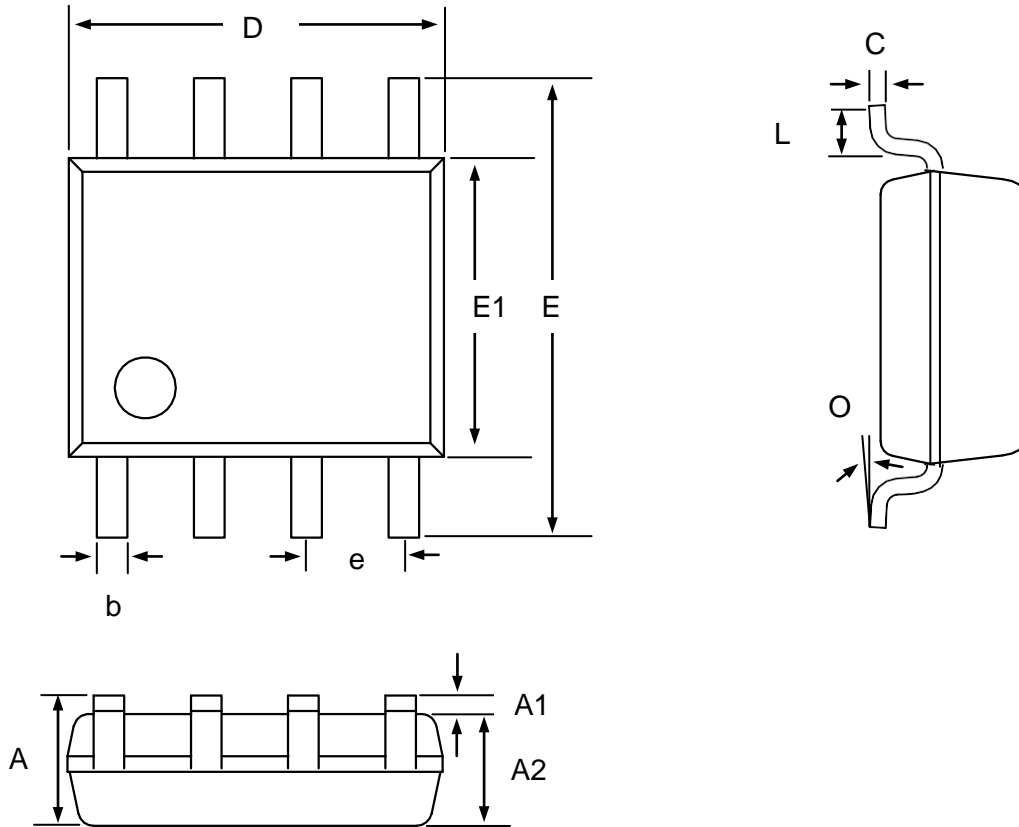


电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
静态参数/Static Characteristics						
Drain-Source Breakdown Voltage	$V_{BR(DSS)}$	$V_{GS}=0V, I_D=250\mu A$	40			V
Gate Threshold Voltage(note3)	$V_{GS(th)}$	$I_D=250\mu A, V_{GS}=V_{DS}$	1.2		2.0	V
Gate-body leakage current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V$			± 100	nA
Zero gate voltage drain current	I_{DSS}	$V_{DS}=40V, V_{GS}=0V$			1	μA
Drain-source on-resistance(note3)	$R_{DS(ON)}$	$V_{GS}=10V, I_D=15A$			13	m Ω
		$V_{GS}=4.5V, I_D=12A$			16	
Drain-Source Diode Forward Voltage(note3)	V_{SD}	$V_{GS}=0V, I_{SD}=8A$			1.5	V
动态参数/Dynamic Characteristics(note4)						
Input Capacitance	C_{iss}	$V_{DS}=20V, V_{GS}=0V,$ $f=1MHz$		1920		pF
Output Capacitance	C_{oss}			150		
Reverse Transfer Capacitance	C_{rss}			115		
开关参数/Switching Characteristics(note4)						
Turn-on delay time	$t_{d(on)}$	$V_{DD}=20V, I_{DS}=15A,$ $V_{GEN}=10V, R_{GEN}=10\Omega,$		13		ns
Turn-on rise time	t_r			27		ns
Turn-off delay time	$t_{d(off)}$			63		ns
Turn-off fall time	t_f			23		ns



封装外观尺寸/SOP8 Package Information



Symbol	Dim in mm		
	Min	Nor	Max
A	1.350	1.550	1.750
A1	0.100	0.175	0.250
A2	1.350	1.450	1.550
b	0.330	0.420	0.510
c	0.170	0.210	0.250
D	4.800	4.900	5.000
e	1.270(BSC)		
E	3.800	3.900	4.000
E1	0.400	0.835	1.2700
L	0°	4°	8°