

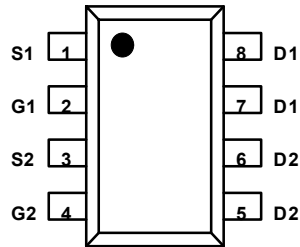


9926A(文件编号: S&CIC1368)

20V N 沟道增强型 MOS 场效应管

$R_{DS(ON)}, V_{GS}@2.5V, I_{DS}@5.0A = 42m\Omega$

$R_{DS(ON)}, V_{GS}@4.5V, I_{DS}@6.0A = 30m\Omega$



SOP-8

绝对最大额定值 ($T_A=25^\circ C$, 除非另有注明)

参数		符号	最大值	单位
漏源极电压		V_{DS}	20	V
栅源极电压		V_{GS}	± 10	V
连续漏电流	$T_A=25^\circ C$	I_D	6	A
	$T_A=70^\circ C$		4.2	
脉冲漏电流		I_{DM}	20	
功耗	$T_A=25^\circ C$	P_D	2	W
	$T_A=70^\circ C$		1.28	
温度范围		T_J, T_{STG}	-55~150	$^\circ C$

热特性

参数		符号	典型值	最大值	单位
最大管结温度	$T \leq 10S$	$R_{\theta JA}$	56	62.5	$^\circ C/W$
最大管结温度	Steady -State		81	110	$^\circ C/W$
最大热阻	Steady -State	$R_{\theta JL}$	40	48	$^\circ C/W$



电特性

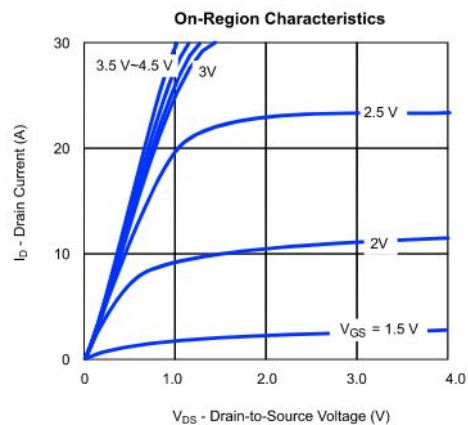
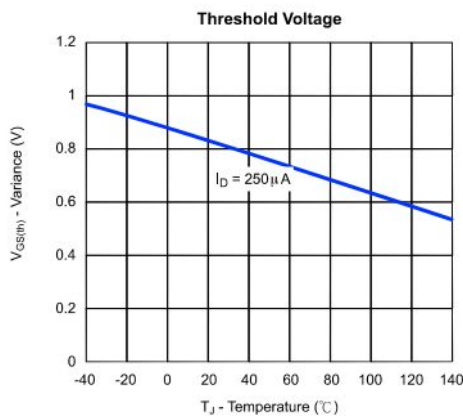
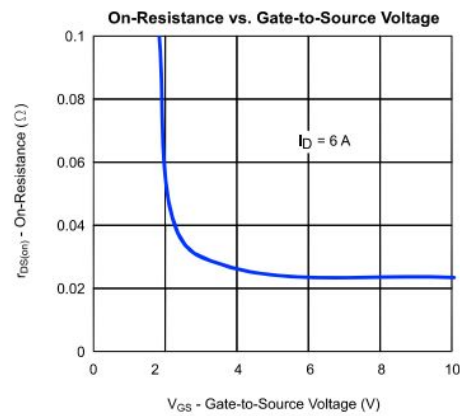
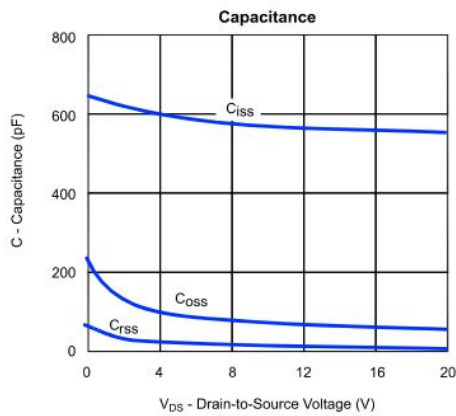
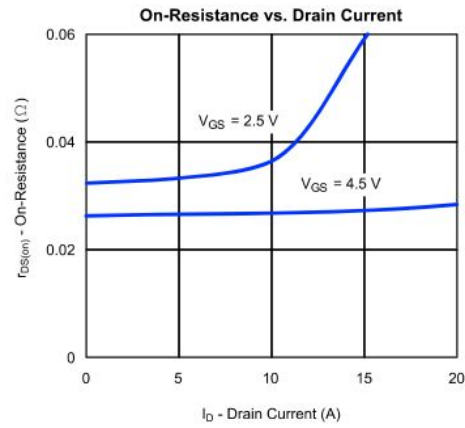
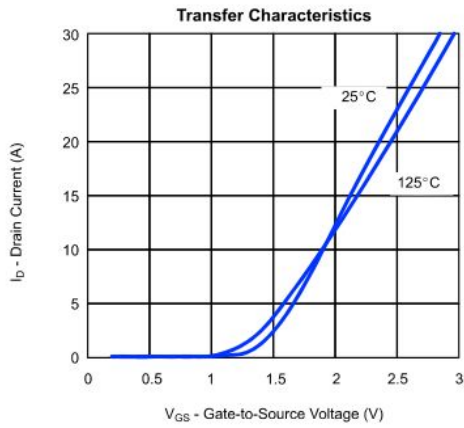
($T_J = 25^\circ\text{C}$, 除非另有注明)

参数	符号	测试条件	最小	典型	最大	单位
静态部分						
漏源击穿电压	BV_{DSS}	$V_{GS} = 0V, I_D = 250\mu A$	20			V
Drain-source 导通内阻	$R_{DS(ON)}$	$V_{GS} = 4.5V, I_{DS} = 6A$		21	30	$m\Omega$
Drain-source 导通内阻	$R_{DS(ON)}$	$V_{GS} = 2.5V, I_{DS} = 5A$		26	42	$m\Omega$
栅极阈值电压	$V_{GS(th)}$	$V_{GS} = V_{GS}, I_D = 250\mu A$	0.5	0.75	1	V
漏源极漏电流	I_{DSS}	$V_{DSS} = 20V, V_{GS} = 0V$			1	μA
栅源极漏电流	I_{GSS}	$V_{GS} = \pm 12V, V_{DS} = 0V$			± 100	nA
动态部分						
栅极总电荷	Q_G	$V_{DS} = 10V, I_D = 6A$ $V_{GS} = 4.5V$		6.24	8.11	nC
栅源电荷	Q_{GS}			1.64	2.13	
栅漏电荷	Q_{GB}			1.34	1.74	
开始延迟时间	$T_{d(on)}$	$V_{DD} = 10V, I_D = 6A$ $I_D = 1A, V_{GS} = 4.5V$		10.4	20.8	ns
上升时间	T_r			4.4	8.8	
关闭延迟时间	$T_{d(off)}$			27.36	54.72	
下降时间	T_f			4.16	8.32	
输入电容	C_{iss}	$V_{DS} = 8V, V_{GS} = 0V$ $f = 1.0\text{MHz}$		522.3		pF
输出电容	C_{oss}			98.48		
反向传输电容	C_{rss}			74.69		
源漏极二极管						
二极管最大正向电流	I_S				1.7	A
二极管正向电压	V_{SD}	$I_S = 1.7A, V_{GS} = 0V$		0.74		V



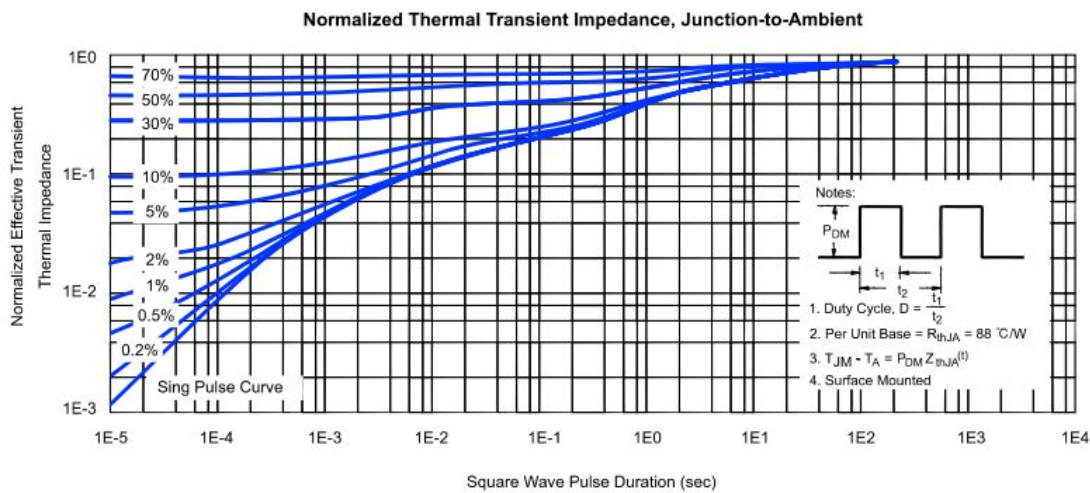
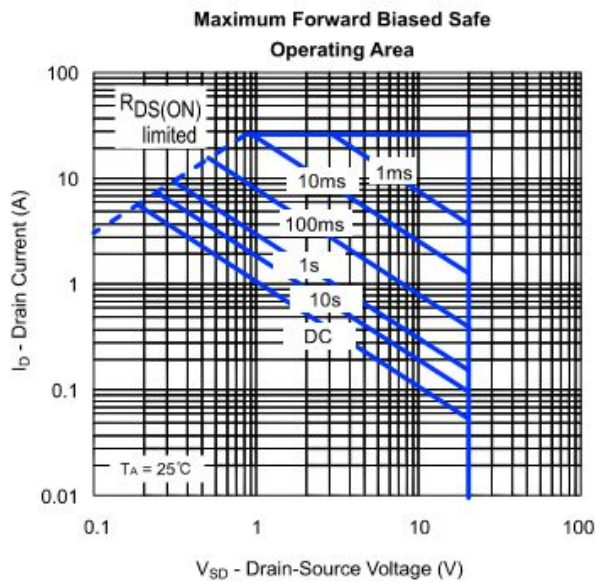
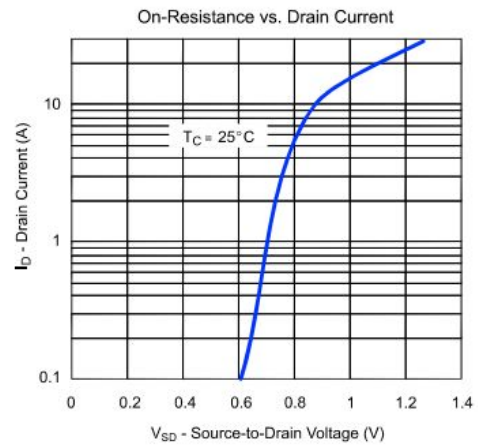
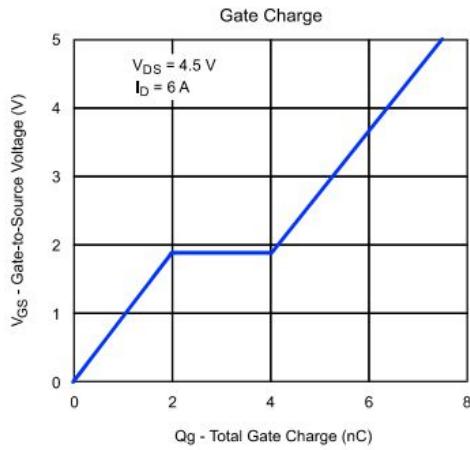
曲线图

Typical Characteristics (T_J = 25°C Noted)





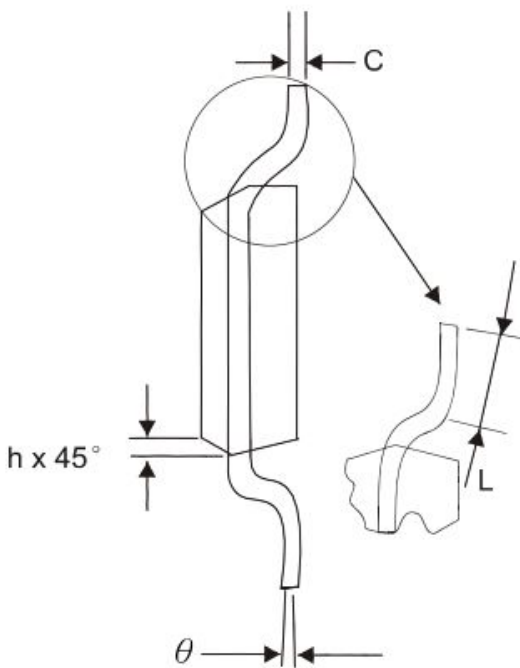
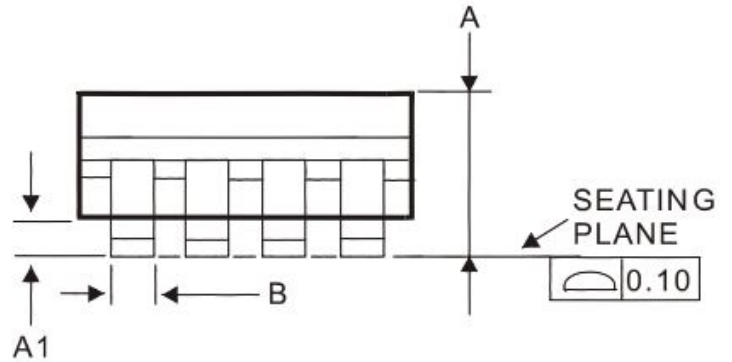
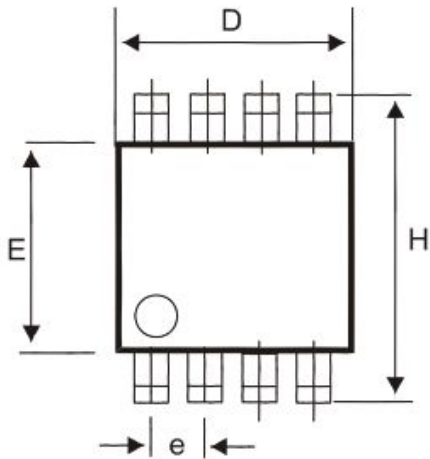
Typical Characteristics (T_J = 25°C Noted)





包装尺寸

SOP-8 Package Outline



DIM	MILLIMETERS	
	MIN	MAX
A	1.35	1.75
A1	0.10	0.25
B	0.35	0.49
C	0.18	0.25
D	4.80	5.00
E	3.80	4.00
e	1.27 BSC	
H	5.80	6.20
h	0.25	0.50
L	0.40	1.25
θ	0°	7°