

用途：用于大功率 DC/DC 转换和功率开关。

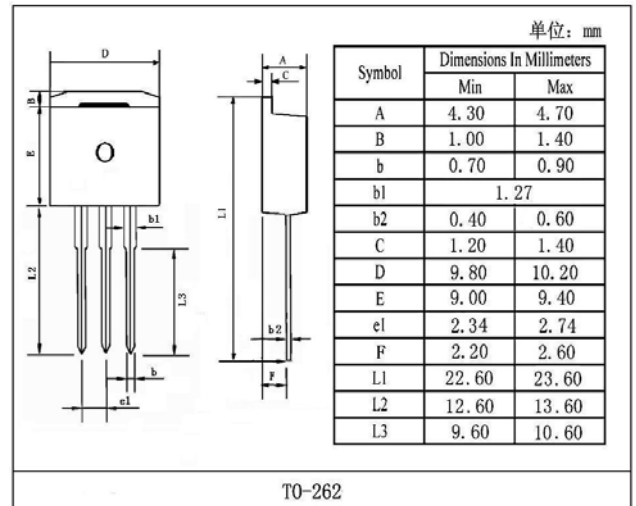
Purpose: These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

特点：低栅电荷, 低反馈电容, 开关速度快。

Features: Low gate charge, low crss, fast switching.

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

参数符号 Symbol	数值 Rating	单位 Unit
V <sub>DSS</sub>	600	V
I <sub>D</sub> (Tc=25°C)	2.0	A
I <sub>D</sub> (Tc=100°C)	1.3	A
I <sub>DM</sub>	6.0	A
V <sub>GSS</sub>	±30	V
E <sub>AS</sub>	120	mJ
E <sub>AR</sub>	5.4	mJ
I <sub>AR</sub>	2.0	A
P <sub>D</sub> (Tc=25°C)	54	W
T <sub>J</sub> , T <sub>STG</sub>	-55 to 150	°C
R <sub>θJC</sub>	2.32	°C/W
R <sub>θJA</sub>	62.5	°C/W

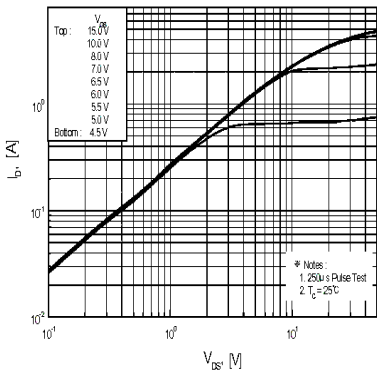


电性能参数/Electrical Characteristics(Ta=25°C)

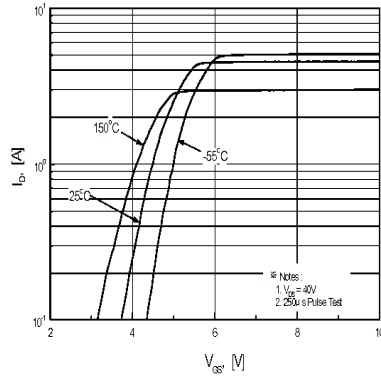
参数符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
BV <sub>DSS</sub>	V <sub>GS</sub> =0V I <sub>D</sub> =250 μ A	600			V
I <sub>DSS</sub>	V <sub>DS</sub> =600V V <sub>GS</sub> =0V			1.0	μ A
	V <sub>DS</sub> =480V T <sub>c</sub> =125°C			100	μ A
I <sub>GSS</sub>	V <sub>GS</sub> =±30V V <sub>DS</sub> =0V			±0.1	μ A
V <sub>GS(th)</sub>	V <sub>DS</sub> =V <sub>GS</sub> I <sub>D</sub> =250 μ A	2.0		4.0	V
R <sub>DS(on)</sub>	V <sub>GS</sub> =10V I <sub>D</sub> =1.0A		4.0	5.0	Ω
g <sub>FS</sub>	V <sub>DS</sub> =40V I <sub>D</sub> =1.0A		2.05		S
V <sub>SD</sub>	V <sub>GS</sub> =0V I <sub>S</sub> =2.0A			1.4	V
C <sub>iss</sub>	V <sub>DS</sub> =25V V <sub>GS</sub> =0V f=1.0MHz		320	420	pF
C <sub>oss</sub>			35	46	pF
C <sub>rss</sub>			4.5	6.0	pF
t <sub>d(on)</sub>	V <sub>DD</sub> =300V I <sub>D</sub> =2.0A R <sub>G</sub> =25 Ω		8.0	30	ns
t <sub>r</sub>			23	60	ns
t <sub>d(off)</sub>			25	60	ns
t <sub>f</sub>			28	70	ns

# BRA2N60 (CS2N60A)

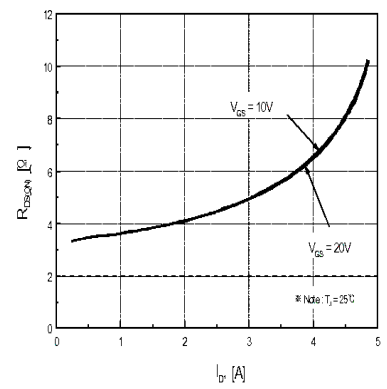
$I_D - V_{DS}$



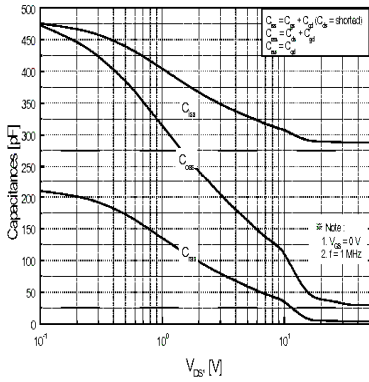
$I_D - V_{GS}$



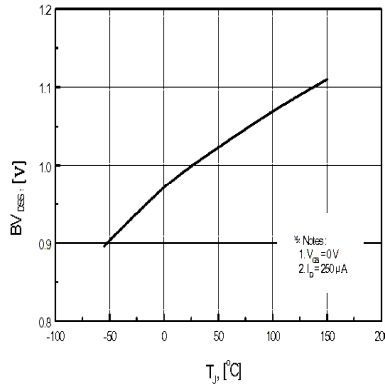
$R_{DS(ON)} - I_D$



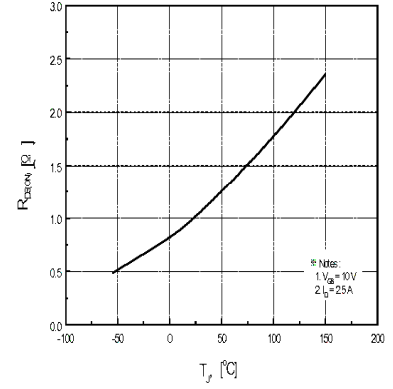
$C_{iss}, C_{oss}, C_{rss} - V_{DS}$



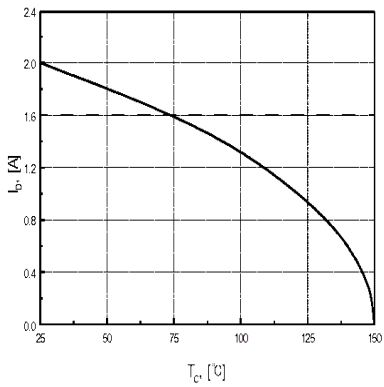
$BV_{DSS} - T_J$



$R_{DS(ON)} - T_J$



$I_D - T_c$



$I_D - V_{DS}$

