

用途：用于高功率 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.

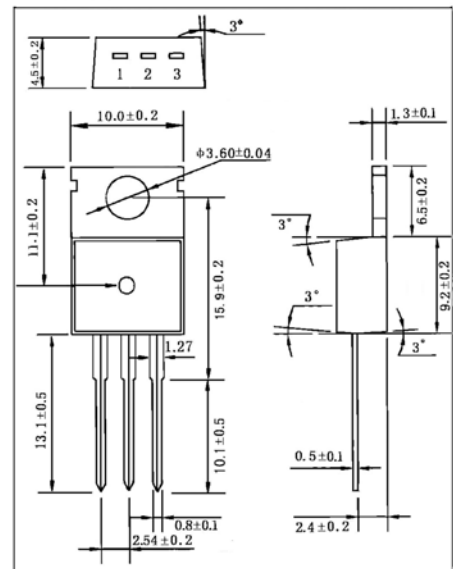
特点：低栅电荷, 低反馈电容, 开关速度快。

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

极限参数/Absolute maximum ratings($T_a=25^{\circ}\text{C}$)

参数符号 Symbol	数值 Rating	单位 Unit
V_{DSS}	600	V
$I_{\text{D}}(T_c=25^{\circ}\text{C})$	2.0	A
$I_{\text{D}}(T_c=100^{\circ}\text{C})$	1.3	A
I_{DM}	6.0	A
V_{GSS}	± 30	V
E_{AS}	120	mJ
E_{AR}	5.4	mJ
I_{AR}	2.0	A
$P_{\text{D}}(T_c=25^{\circ}\text{C})$	54	W
$T_{\text{J}}, T_{\text{STG}}$	-55 to 150	$^{\circ}\text{C}$

T0-220 单位 :mm

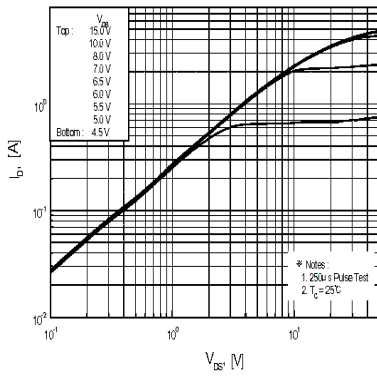


引脚：1 G 2 D 3 S

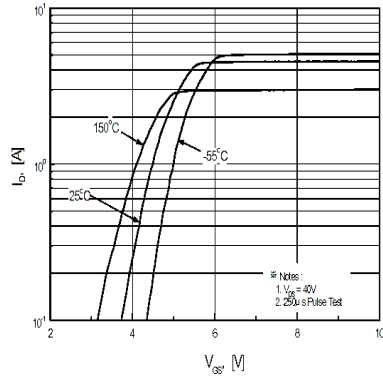
电性能参数/Electrical Characteristics($T_a=25^{\circ}\text{C}$)

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_{DSS}	$V_{\text{GS}}=0\text{V}$ $I_{\text{D}}=250\text{ }\mu\text{A}$	600			V
I_{DSS}	$V_{\text{DS}}=600\text{V}$ $V_{\text{GS}}=0\text{V}$			1.0	μA
	$V_{\text{DS}}=480\text{V}$ $T_c=125^{\circ}\text{C}$			100	μA
I_{GSS}	$V_{\text{GS}}=\pm 30\text{V}$ $V_{\text{DS}}=0\text{V}$			± 0.1	μA
$V_{\text{GS(th)}}$	$V_{\text{DS}}=V_{\text{GS}}$ $I_{\text{D}}=250\text{ }\mu\text{A}$	2.0		4.0	V
$R_{\text{DS(on)}}$	$V_{\text{GS}}=10\text{V}$ $I_{\text{D}}=1.0\text{A}$		4.0	5.0	Ω
g_{FS}	$V_{\text{DS}}=40\text{V}$ $I_{\text{D}}=1.0\text{A}$		2.05		S
V_{SD}	$V_{\text{GS}}=0\text{V}$ $I_{\text{S}}=2.0\text{A}$			1.4	V
C_{iss}	$V_{\text{DS}}=25\text{V}$ $V_{\text{GS}}=0\text{V}$ $f=1.0\text{MHz}$		320	420	pF
C_{oss}			35	46	pF
C_{rss}			4.5	6.0	pF
$t_{\text{d(on)}}$	$V_{\text{DD}}=300\text{V}$ $I_{\text{D}}=2.0\text{A}$ $R_{\text{G}}=25\text{ }\Omega$		8.0	30	ns
t_{r}			23	60	ns
$t_{\text{d(off)}}$			25	60	ns
t_{f}			28	70	ns

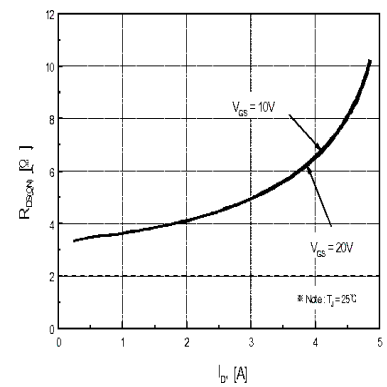
$I_D - V_{DS}$



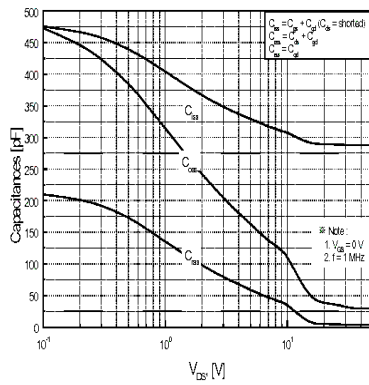
$I_D - V_{GS}$



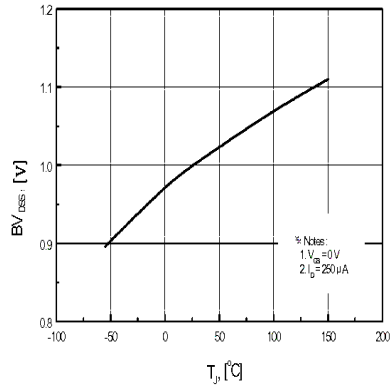
$R_{DS(on)} - I_D$



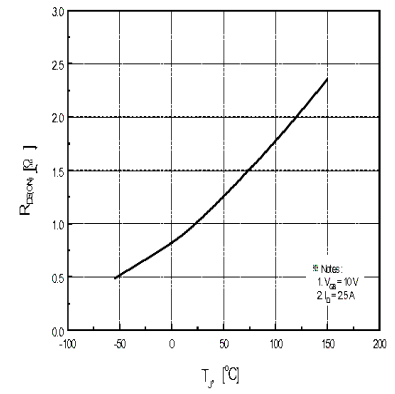
$C_{iss}, C_{oss}, C_{rss} - V_{DS}$



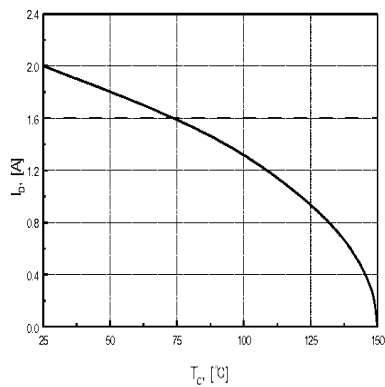
$BV_{DSS} - T_J$



$R_{DS(on)} - T_J$



$I_D - T_C$



$I_D - V_{DS}$

