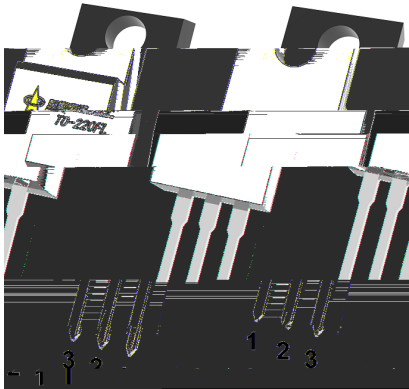
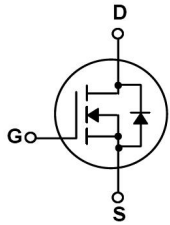


TO-220FL N MOS N-CHANNEL MOSFET in a TO-220FL Plastic Package.

Ultra low gate charge, low effective output capacitance, high switch speed.

It is very suitable for various AC/DC power conversion in switching mode operation for system miniaturization and higher efficiency.

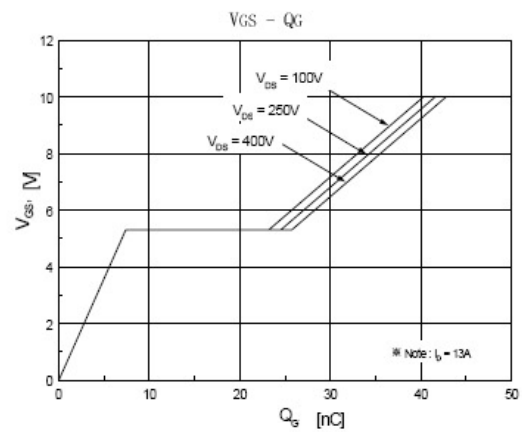
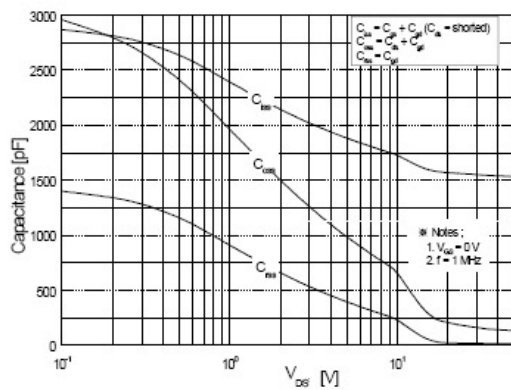
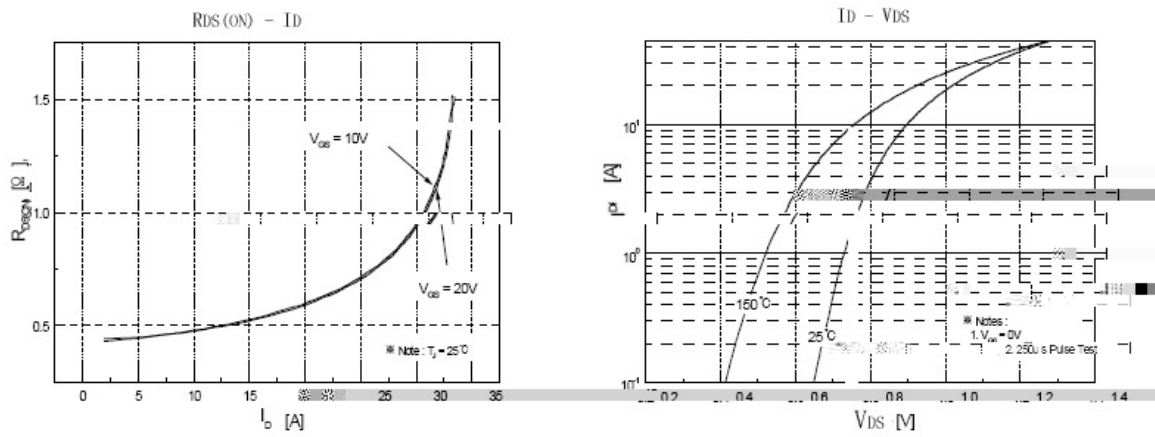
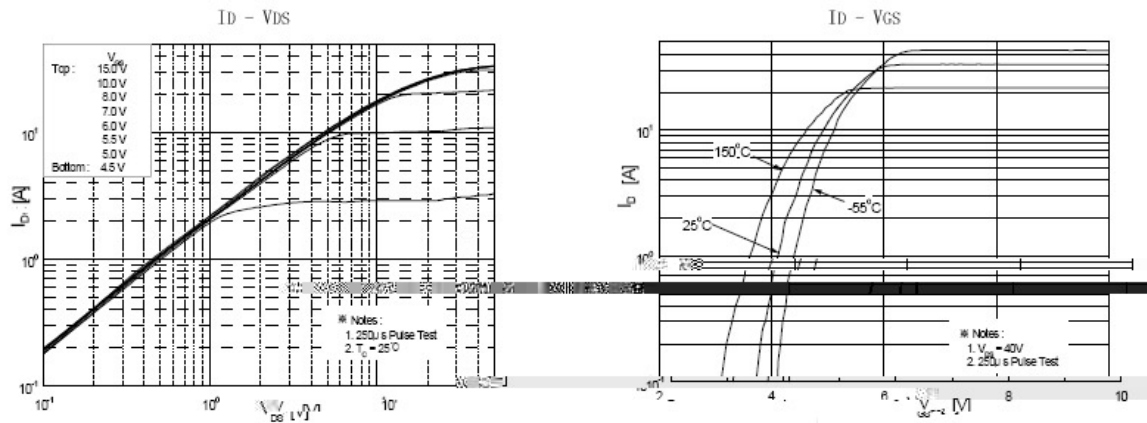


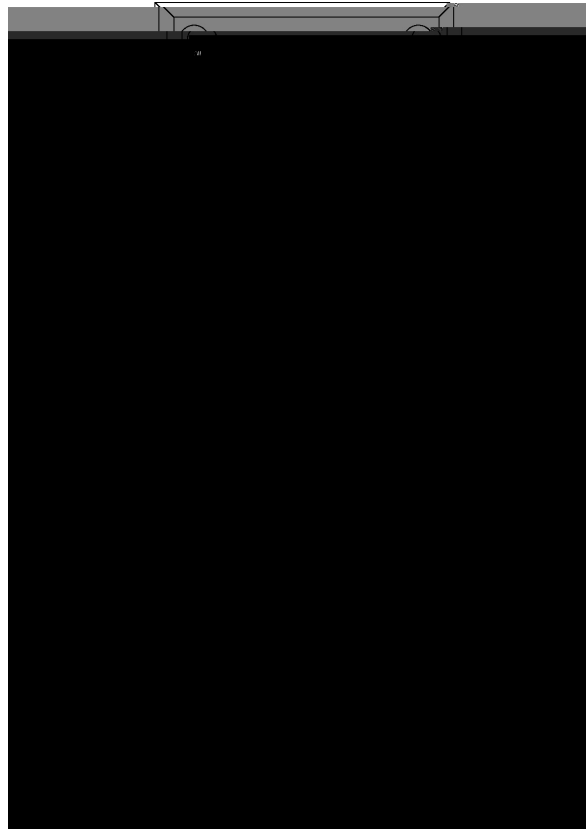
PIN1 G PIN 2 D PIN 3 S

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	500	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	13	A
	$I_D(T_C=100^\circ\text{C})$	8	A
Drain Current - Pulsed	I_{DM}	52	A
Gate-Source Voltage	V_{GSS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	860	mJ
Repetitive Avalanche Energy	E_{AR}	19.5	mJ
Avalanche Current	I_{AR}	13	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	48	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	500			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=500V$ $V_{GS}=0V$			1.0	μA
		$V_{DS}=400V$ $T_C=125^\circ\text{C}$			10	μA
Gate-Body Leakage Current, Forward	I_{GSS}	$V_{GS}=\pm 30V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=6.5A$		0.37	0.48	Ω
Forward Transconductance	g_{FS}	$V_{DS}=40V$ $I_D=6.5A$		15		S
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=13A$			1.4	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0MHz$		1580	2055	pF
Output Capacitance	C_{oss}			180	235	
Reverse Transfer Capacitance	C_{rss}			20	25	
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=250V$ $I_D=13A$ $R_G=25\Omega$		25	60	ns
Turn-On Rise Time	t_r			100	210	
Turn-Off Delay Time	$t_{d(off)}$			130	270	
Turn-Off Fall Time	t_f			100	210	





BR

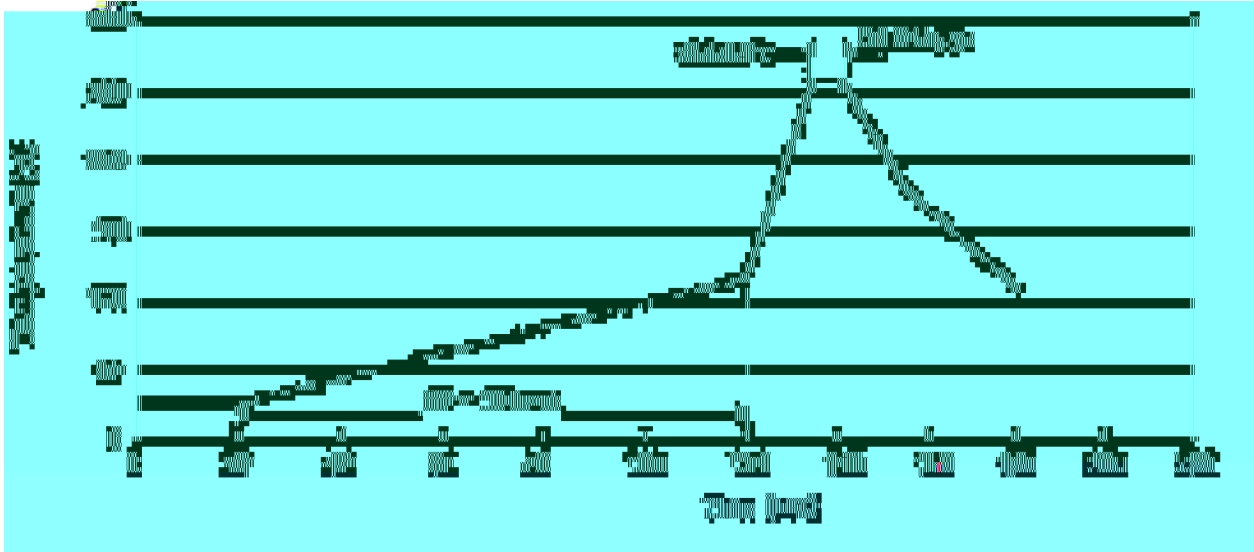
13N50

Note:

BR: Company Code

13N50: Product Type

****: Lot No. Code, code change with Lot No


Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

270	5	10	1 sec.	Temp.:270±5	Time:10±1 sec
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/ TUBE

Package Type 封装形式	Units/Tube	Units 包装数量	Dimension 包装尺寸 (unit: mm ³)
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