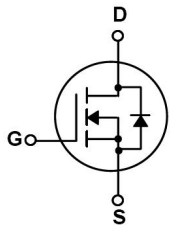


TO-220FL N MOS N-CHANNEL MOSFET in a TO-220FL Plastic Package.

Low gate charge, Low Crss , Fast switching, HF Product.

High efficiency switch mode power supplies, Electronic lamp ballasts based on half bridge, UPS.



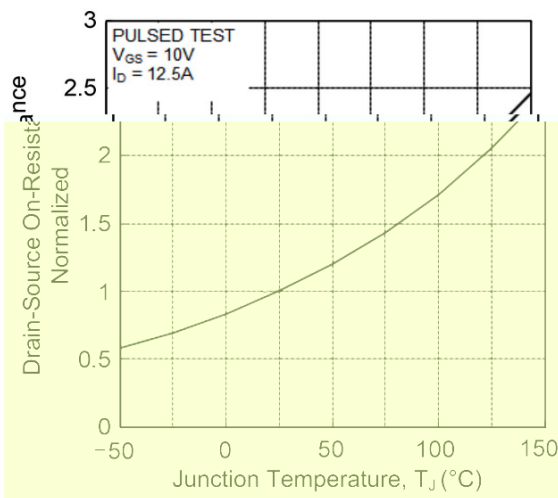
PIN1 G PIN 2 D PIN 3 S

See Marking Instructions.

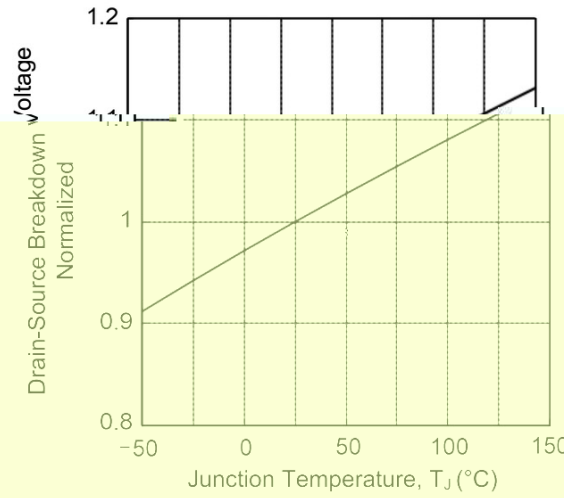
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	500	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	25	A
Drain Current - Pulsed	I_{DM}	100	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	1900	mJ
Avalanche Current	I_{AS}	19.5	A
Thermal Resistance, Junction to Case	$R_{\theta JC}$	2.5	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	62.5	$^\circ\text{C}/\text{W}$
Power Dissipation	P_D	50	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V$ $I_D=250\mu A$	500			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=500V$ $V_{GS}=0V$			1.0	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 30V$ $V_{DS}=0V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	2.0	3.2	4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=12.5A$		0.18	0.27	Ω

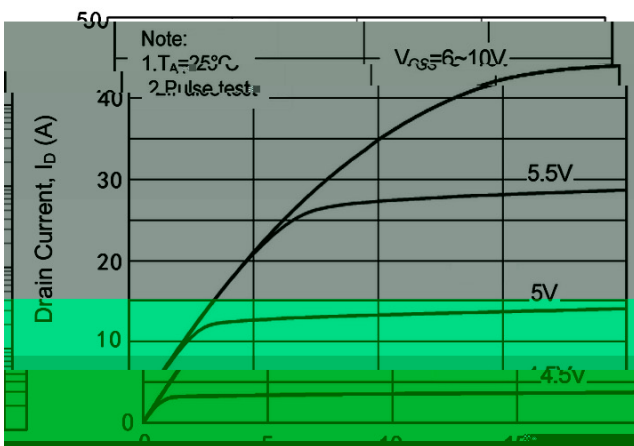
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=250V$ $I_D=25A$ $R_G=10\Omega$		37.2		ns
Turn-On Rise Time	t_r			64.4		
Turn-Off Delay Time	$t_{d(off)}$			86.8		
Turn-Off Fall Time	t_f			46		
Maximum Continuous Drain-Source Diode Forward Current	I_S				25	A



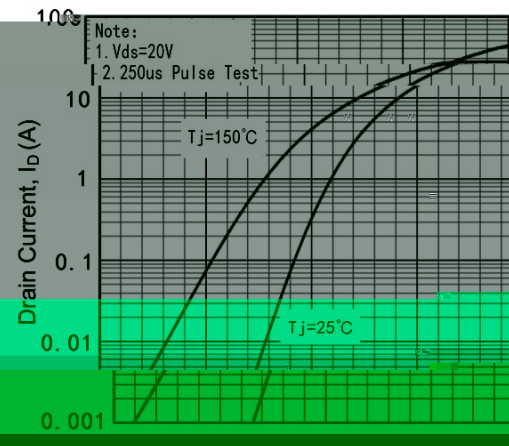
1. Drain-Source On-Resistance vs. Junction Temperature



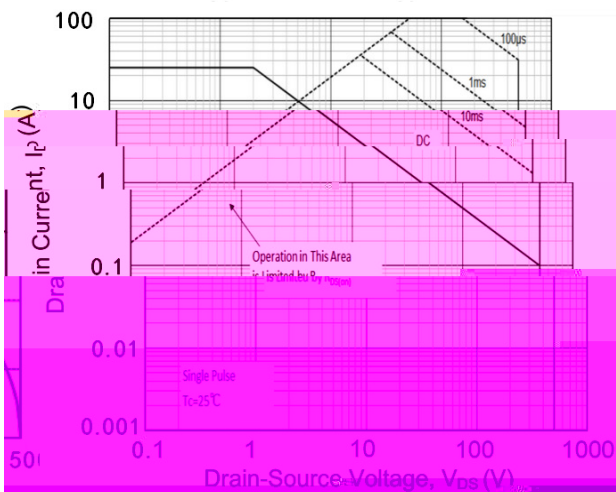
2. Breakdown Voltage vs. Junction Temperature



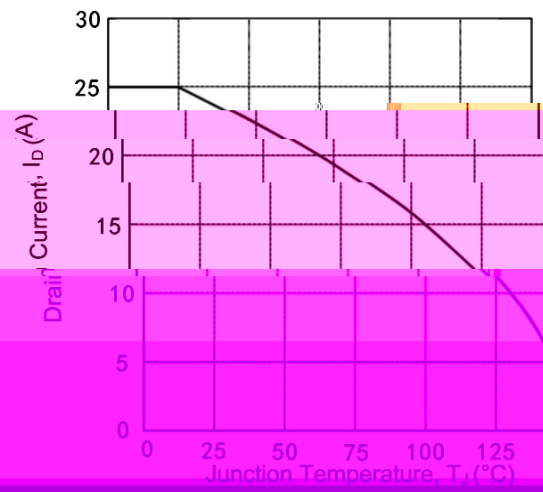
3. Drain Current vs. Drain-Source Voltage



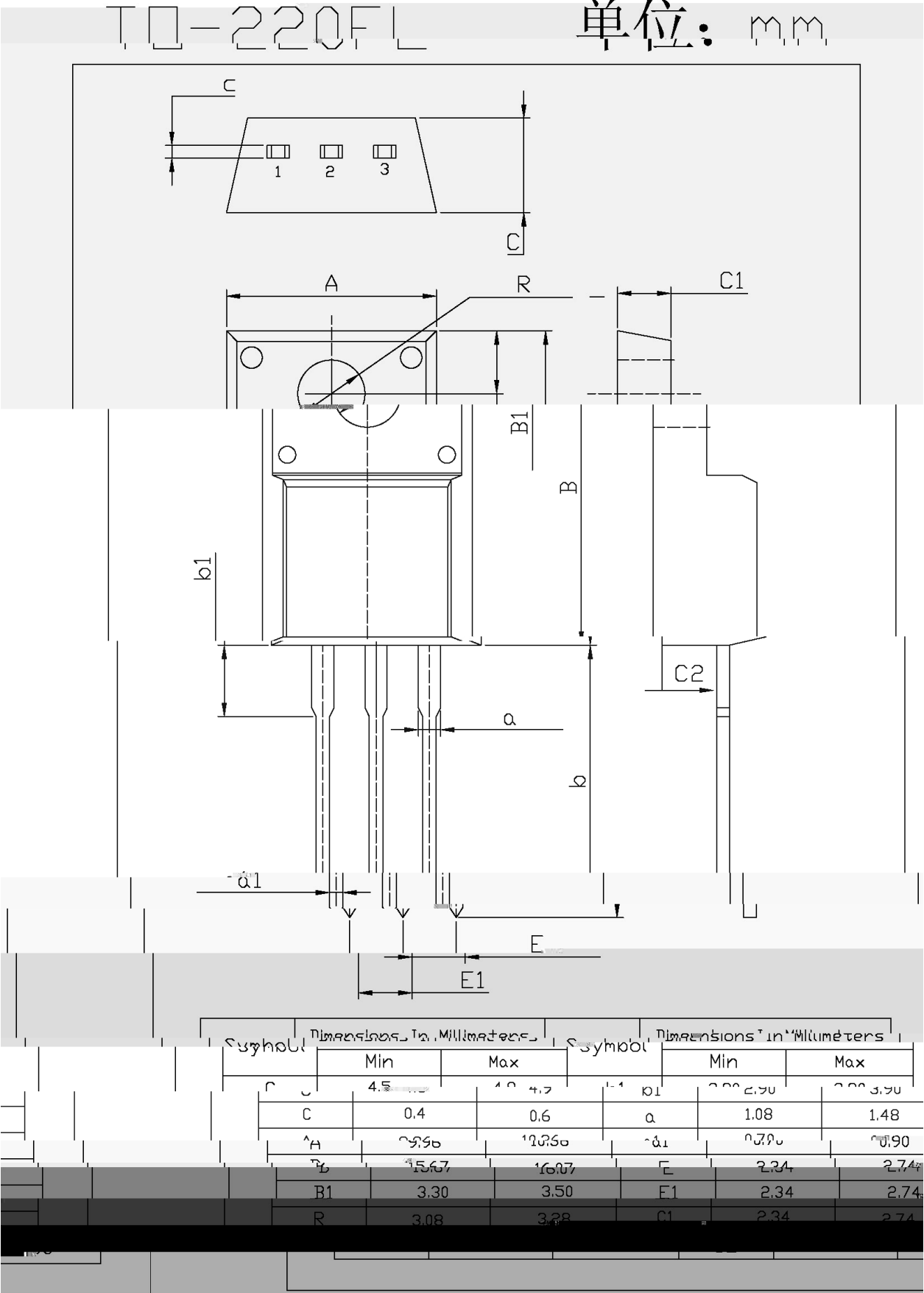
4. Drain Current vs. Gate-Source Voltage

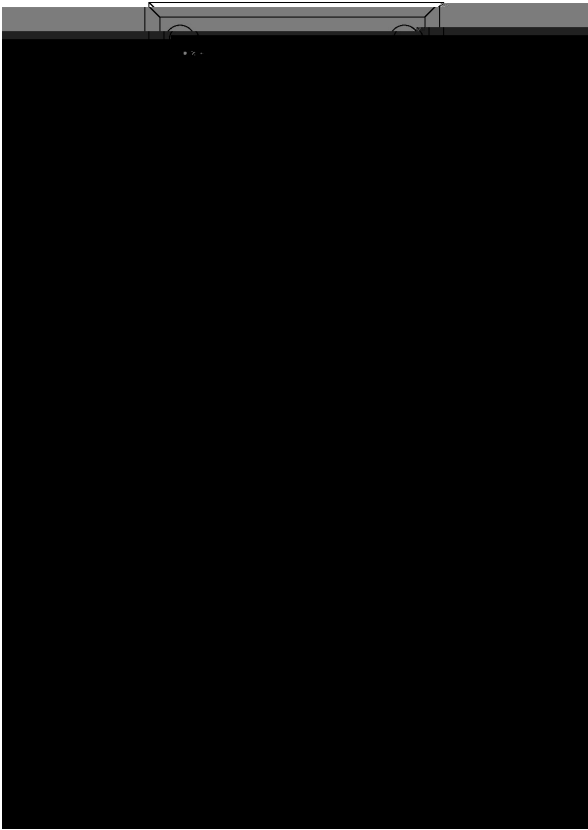


5. Safe Operation Area



6. Drain Current vs. Junction Temperature





BR

25N50

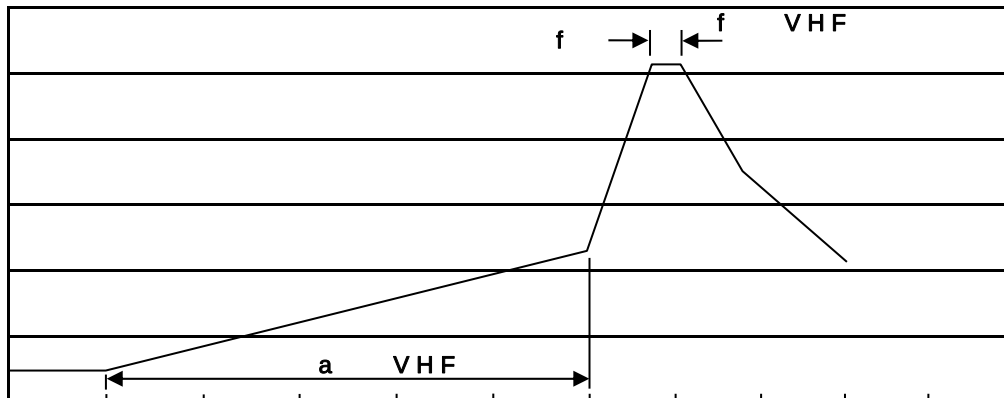
Note:

BR: Company Code

25N50: Product Type Code

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

7HPSHUDWXUH



7LPH VHF

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

/ TUBE

Package Type 7~E	Units ;>H					Dimension ;> p . (unit /mm ³)		
	Units/Tube /•1×	Tubes/Inner Box •1×/-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Tube•1×	Inner Box	Outer Boxç
TO-220FL	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180