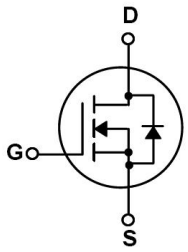
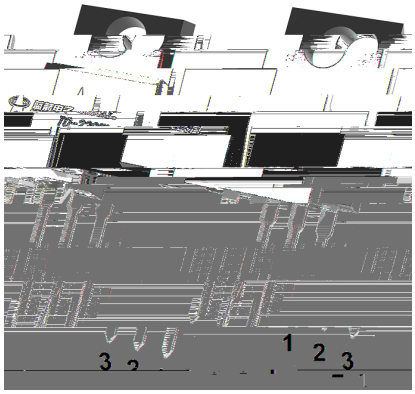
: 5 , 2 .> / / x 4 ?ú 3 5 9 « | • 'ož
N-Channel MOSFET in a TO-220FL Plastic Package.

V_{DS}=500V I_D=24A
$R_{DS(ON)}$@10V ”0.25 (Typ. 0.17)
$R_{DS(ON)}$@6V ”0.3 (Typ. 0.18m)

9 ä 9o• ä , ä • ¼ • k ò ä | ä • ¼ % ›o• ä œ ƒ û 3ož
Designed for high voltage, high speed power switching applications such as high efficiency switched mode power supplies, active power factor correction.





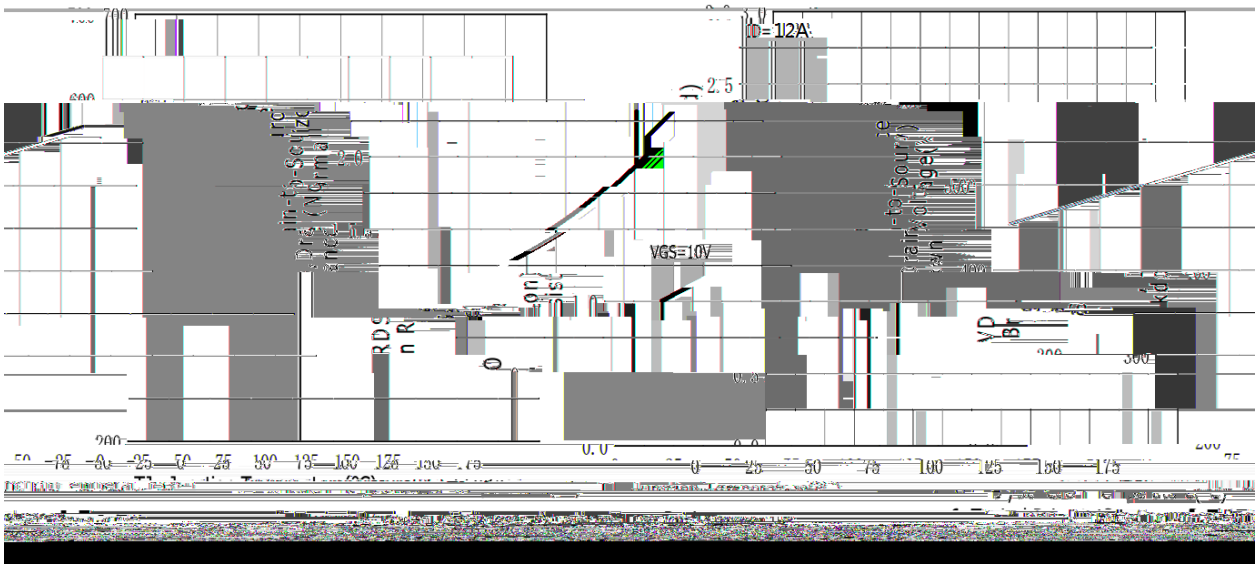
PIN1 y G PIN 2 y D PIN 3 y S

, M V / Marking

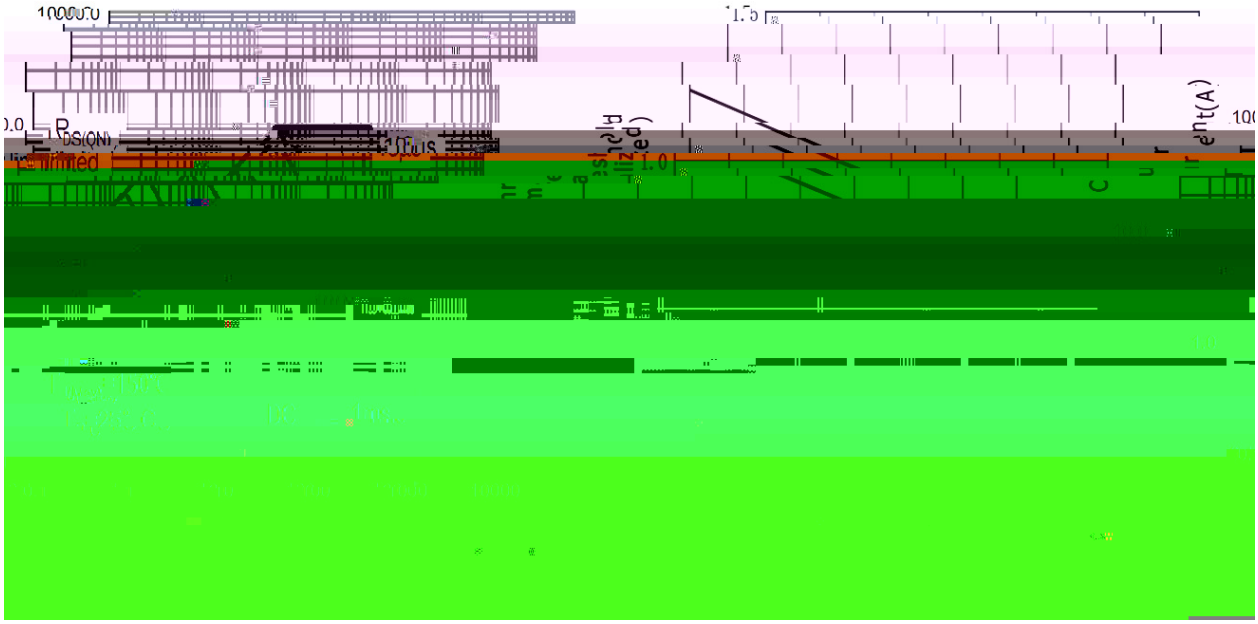
@ ƒ Parameter	… Z Symbol	ƒ › Rating	% y Unit
Drain-to-Source Breakdown Voltage	V_{DSS}	500	V
Continuous Drain Current	I_D(Tc=25)	24	A
Drain Current Pulsed	I_{DM}	90	A
Gate-to-Source Voltage	V_{GS}	±30	V
Avalanche Current	I_{AS}	21	A
Single Pulse Avalanche Energy	E_{AS}	1960	mJ
Power Dissipation	P_D(Tc=25)	50	W
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	
Thermal Resistance Junction-Case	R JC	2.5	/W

@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Drain-to-Source Breakdown Voltage	V_{DSS}	V_{GS}=0V I_D=250 A	500	550		V
Drain-to-Source Leakage Current	I_{DSS}	V_{DS}=500V V_{GS}=0V			1.0	A
Gate-to-Source Forward Leakage	I_{GSS}	V_{GS}=±30V V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250 A	2.0		4.0	V
Static Drain-to-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=12A		0.17	0.25	
Static Drain-to-Source On-Resistance	$R_{DS(on)}$	V_{GS}=6V I_D=6A		0.18	0.3	
Diode Forward Voltage	V_{SD} V					

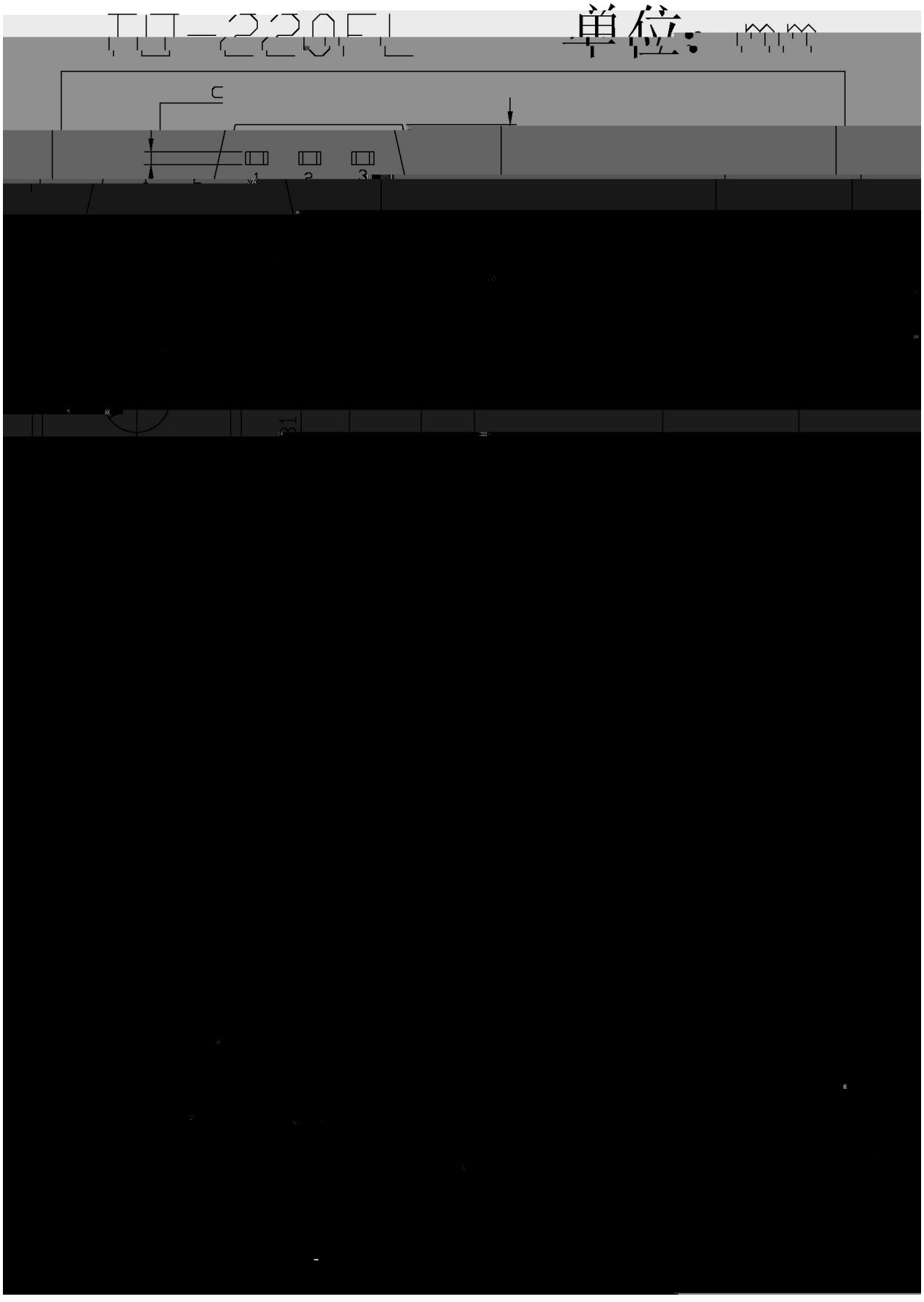
Ô ? d • Ž ¢ / Electrical Characteristic Curve

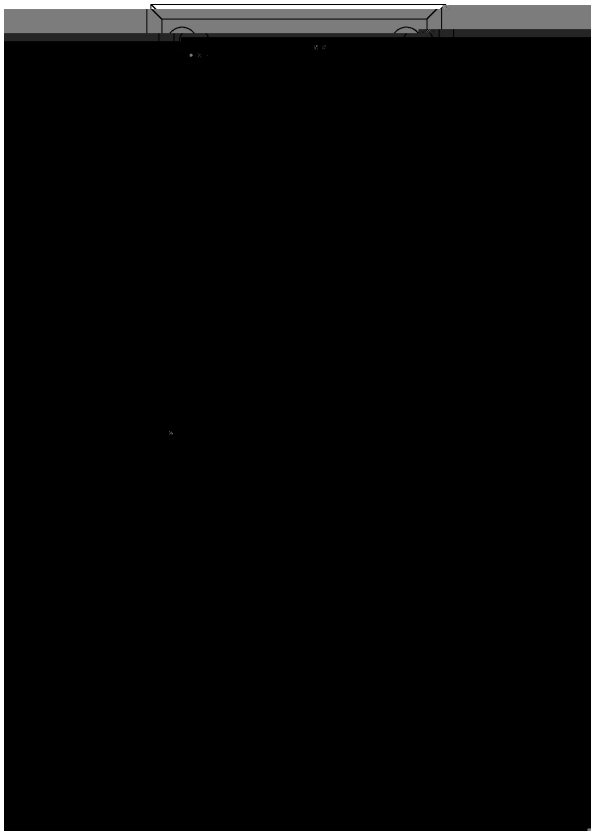


Ô ? d • Ž ¢ / Electrical Characteristic Curve

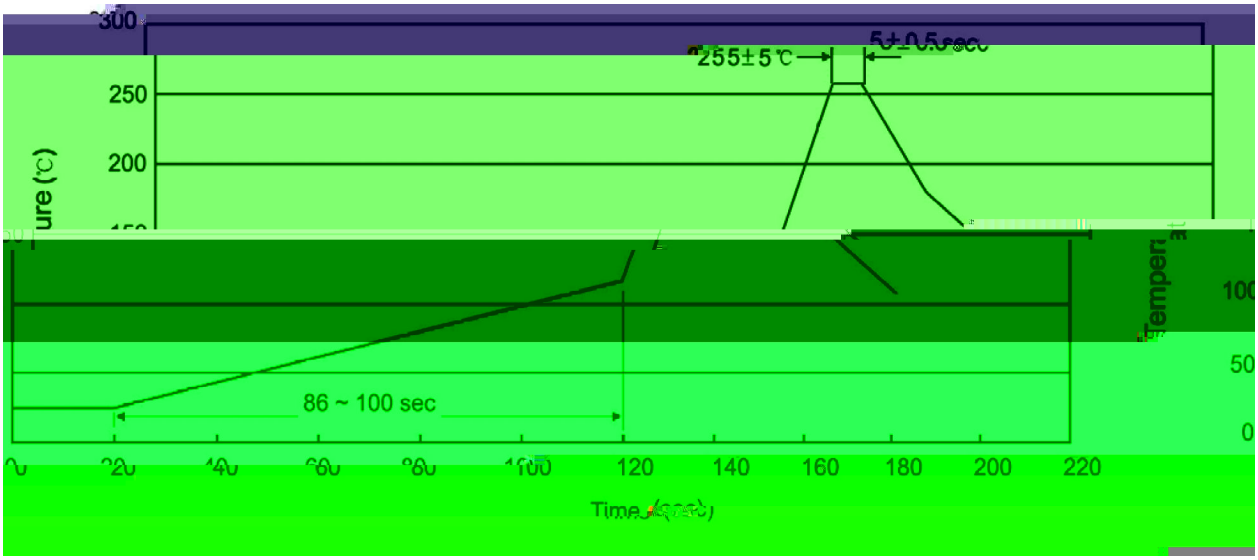


Ø ¤ =) ¢ / Package Dimensions





G PD t … • Ž ¢ (x /) / Temperature Profile for Dip Soldering(Pb-Free)



ª ¢ y

1o• Ä ½ “ † 25 ½150 - k ž • 60 ½90sec;

2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:25~150 - , Time:60~90sec.

2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 270 r5 - ž • y 10 r1 sec. Temp.:270±5 Time:10±1 sec

G P á / Packaging SPEC.

ì ’ x / TUBE

Package Type 7>û ˜ E	Units ;>û ¦H					Dimension ;>û p . (unit Æmm³)		
	Units/Tube / •1×	Tubes/Inner Box •1× /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Tube•1×	Inner Box×	Outer Box1ç
TO-220FL	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

„ Ð y ƒ / Notices