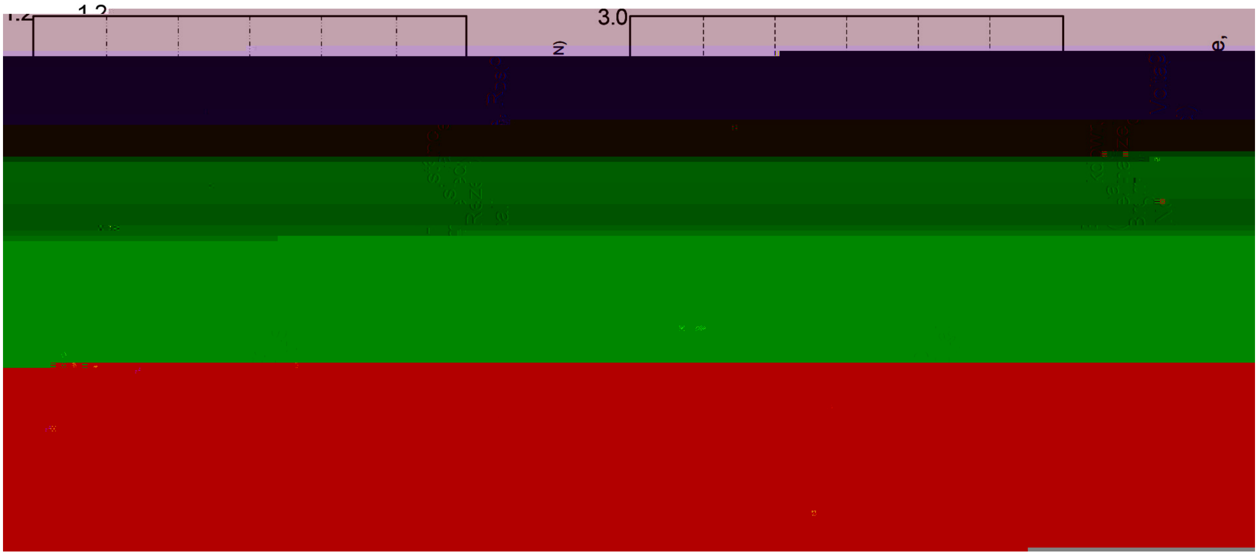
/ Absolute Maximum Ratings(Ta=25)

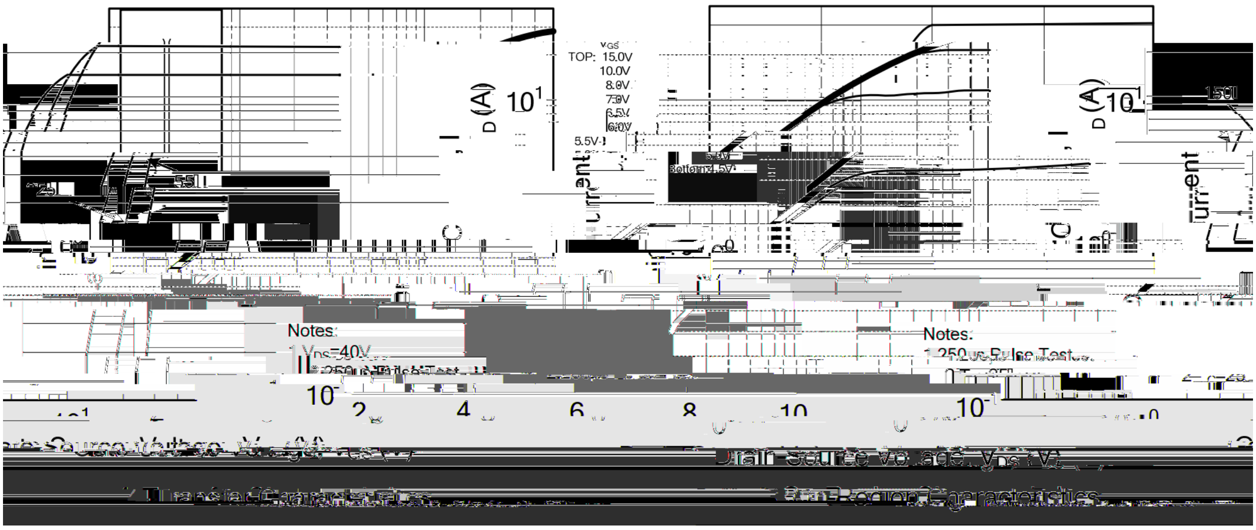
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	650	V
Drain Current	I_D(Tc=25)	10	A
Drain Current	I_D(Tc=100)	5.7	A
Drain Current - Pulsed	I_{DM}	38	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	488.9	mJ
Avalanche Current	I_{AR}	9.5	A
Thermal Resistance, Junction to Case	$R_{\theta JC}$	2.5	/W
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	65	/W
Power Dissipation	P_D(Tc=25)	50	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	650			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=600V V_{GS}=0V			1.0	μA
		V_{DS}=480V T_C=125			10	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±30V V_{DS}=0V			±10	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250μA	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=4.75A		0.8	0.95	Ω
Continuous Source Current	I_S				10	A
Maximum Pulsed Current	I_{SM}				38	A
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=9.5A			1.4	V
Reverse Recovery Time	t_{rr}	V_{GS}=0V I_S=10A di/dt = 100 A/μs		333		qv
Reverse Recovery Charge	Q_{rr}			3.9		ƤF
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		1570		pF
Output Capacitance	C_{oss}			166		pF
Reverse Transfer Capacitance	C_{rss}			18		pF
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=300V I_D=9.5A R_G=25Ω		23		ns
Turn-On Rise Time	t_r			69		ns
Turn-Off Delay Time	$t_{d(off)}$			144		ns
Turn-Off Fall Time	t_f			77		ns

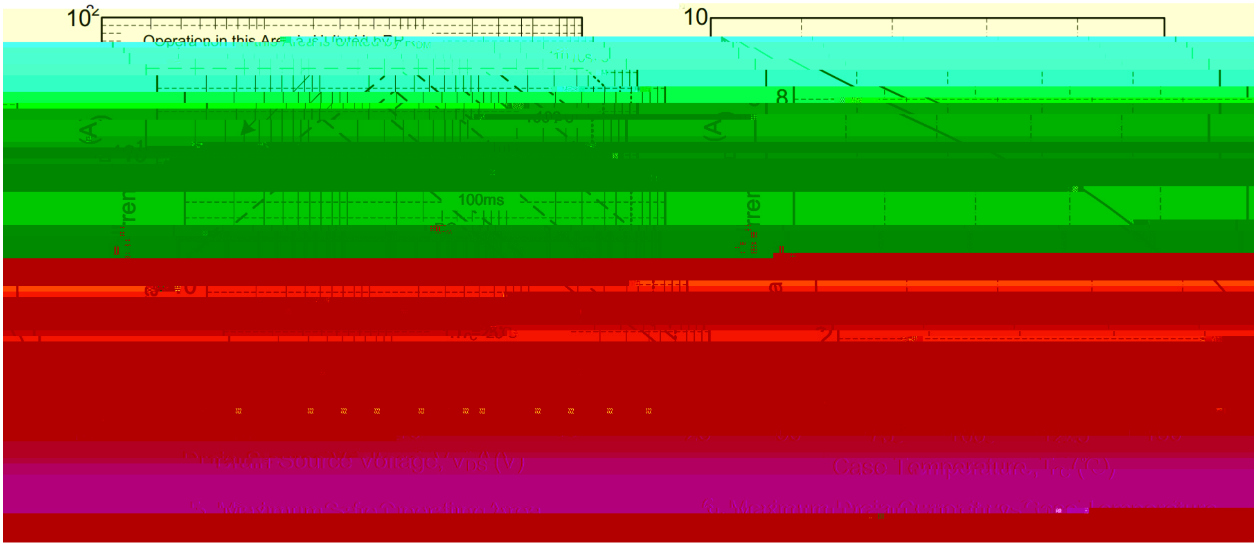
/ Electrical Characteristic Curve



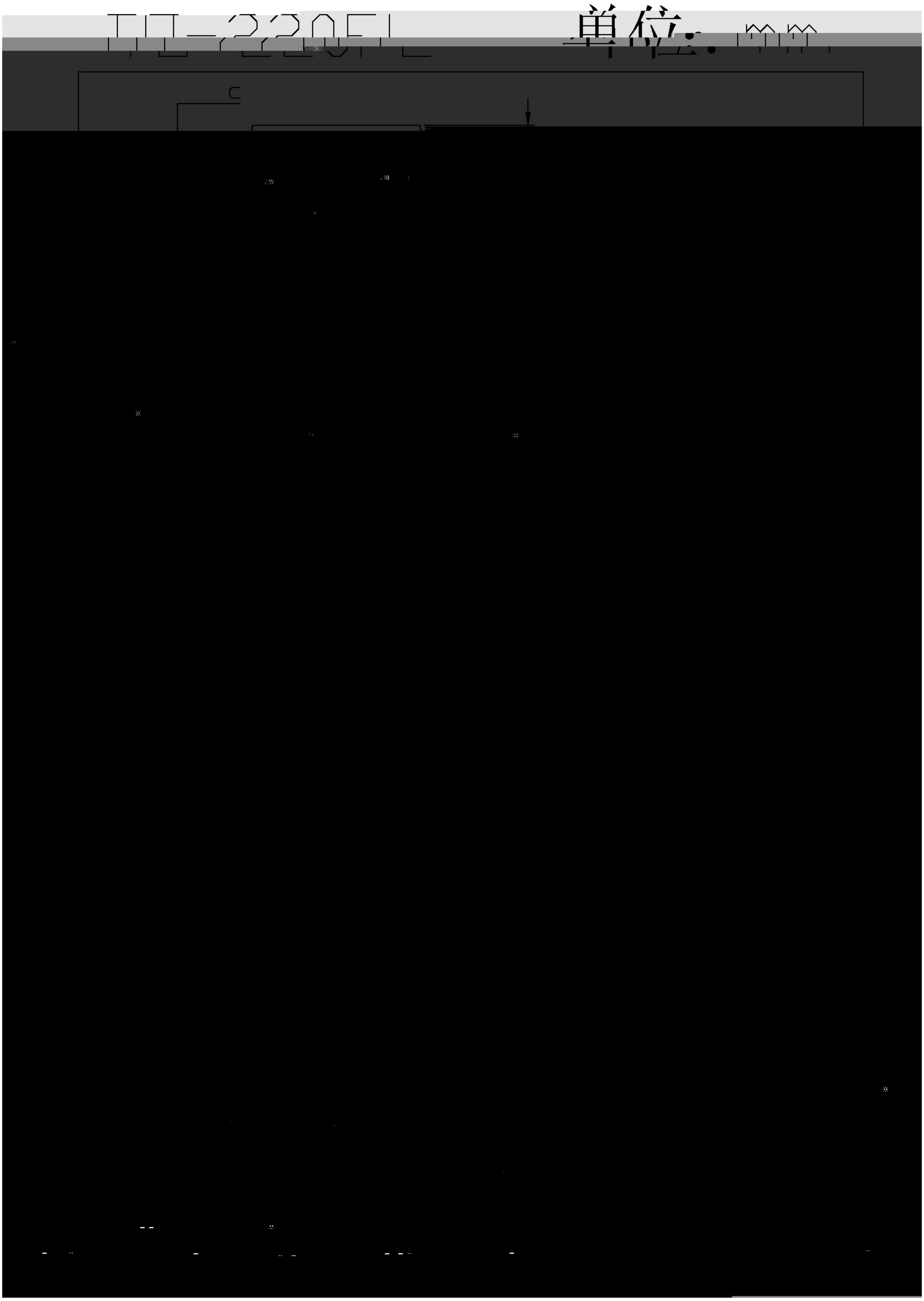


Transfer Characteristics

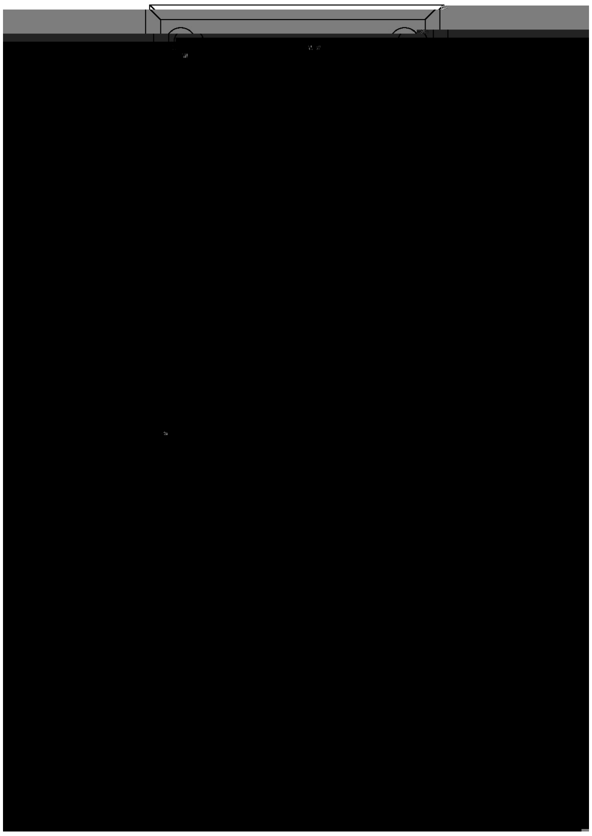
On-Region Characteristics



/ Package Dimensions



/ Marking Instructions



ب ˝ χ

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10N65 χ ҥӂ ʒ ᴺ Ⴁ

---- χ ҥӂ ꞁ ꞙ ῆ ᴺ Ⴁ ɩ ɞ ꞁ ꞙ ῆ ᴺ ψ ק

Note:

BR: Company Code

10N65: Product Type Code

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

( ) / Temperature Profile for Dip Soldering(Pb-Free)

ب ˝ χ
1 ƚ ♬ □ ẙ 25 Ḱ 150 ƚ ı ̀H ڗ 60 Ḱ 90sec;
2 Ś Ӫ □ ẙ 255 ° 5 ƚ ı ̀H ڗ ʿY ʎ ꟿ 5 ° 0.5sec;
3 ì ˙ ˥ ˛ ɔ ﻫ ẙ ꟿ 2 Ḱ 10 ƚ /sec.

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

/ Resistance to Soldering Heat Test Conditions

□ ẙ χ 270 ° 5 ƚ ̀H ڗ χ 10 ° 1 sec.

Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

˃˅ ˥ ɣ ㅌ / TUBE

Package Type Units Dimension (unit mm^3