

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	400	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	10	A
Drain Current	$I_D(T_C=100^\circ\text{C})$	6.3	A
Drain Current - Pulsed	I_{DM}	40	A
Gate-Source Voltage	V_{GS}	± 30	V
Avalanche Current	I_{AR}	10	A
Single Pulsed Avalanche Energy	E_{AS}	450	mJ
Repetitive Avalanche Energy	E_{AR}	13.4	
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	44	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

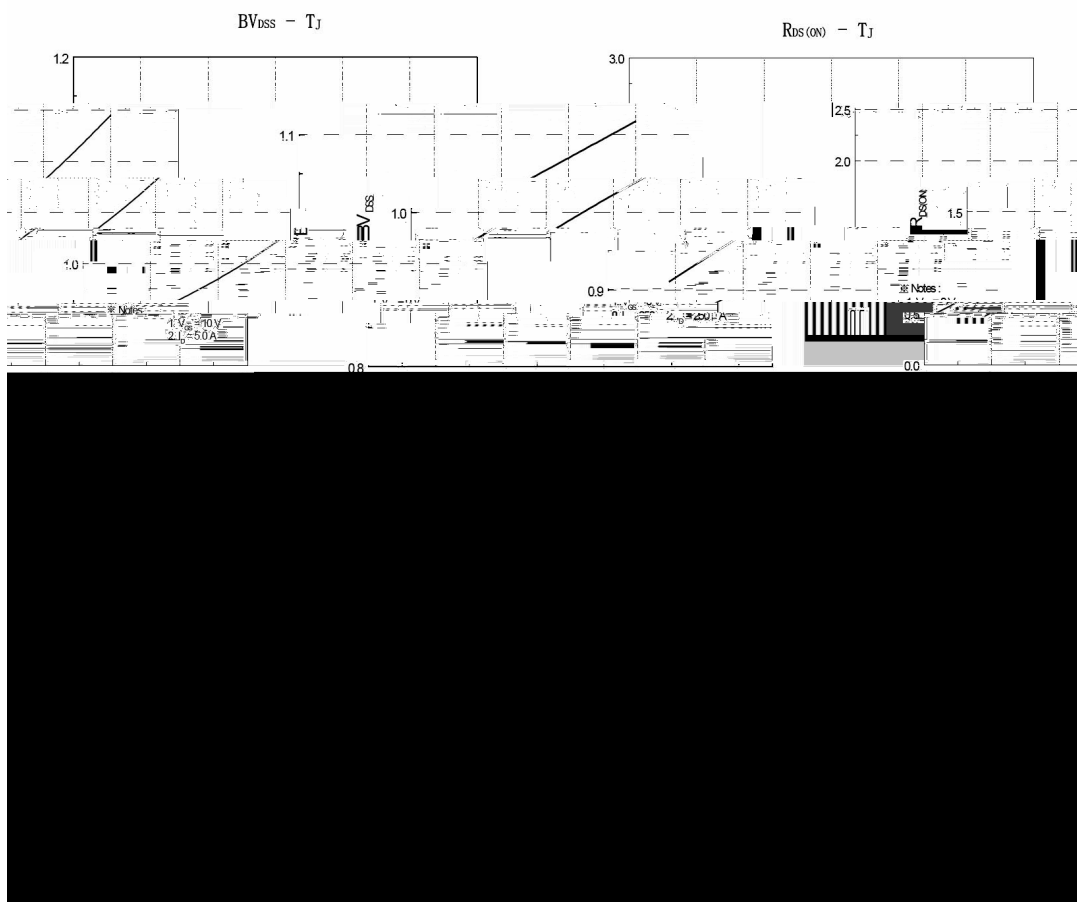
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Typ	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V, I_D=250\mu A$	400	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=400V, V_{GS}=0V$	1	A
		$V_{DS}=320V, T_C=125^\circ\text{C}$	1	A
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 30V, V_{DS}=0V$	1	A
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	4.1	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=10A$	0.44	Ω
Forward Transconductance	g_{FS}	$V_{DS}=40V, I_D=5.0A$	9.0	S
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V, I_S=10A$		V
Input Capacitance	C_{iss}	$V_{DS}=25V, V_{GS}=0V$	1570	pF
Output Capacitance	C_{oss}	$f=1.0\text{MHz}$	150	pF
Reverse Transfer Capacitance	C_{rss}		15	
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=200V, R_G=25\Omega$	25	ns
Turn-On Rise Time	t_r		60	
Turn-Off Delay Time	$t_{d(off)}$		115	
Turn-Off Fall Time	t_f		70	

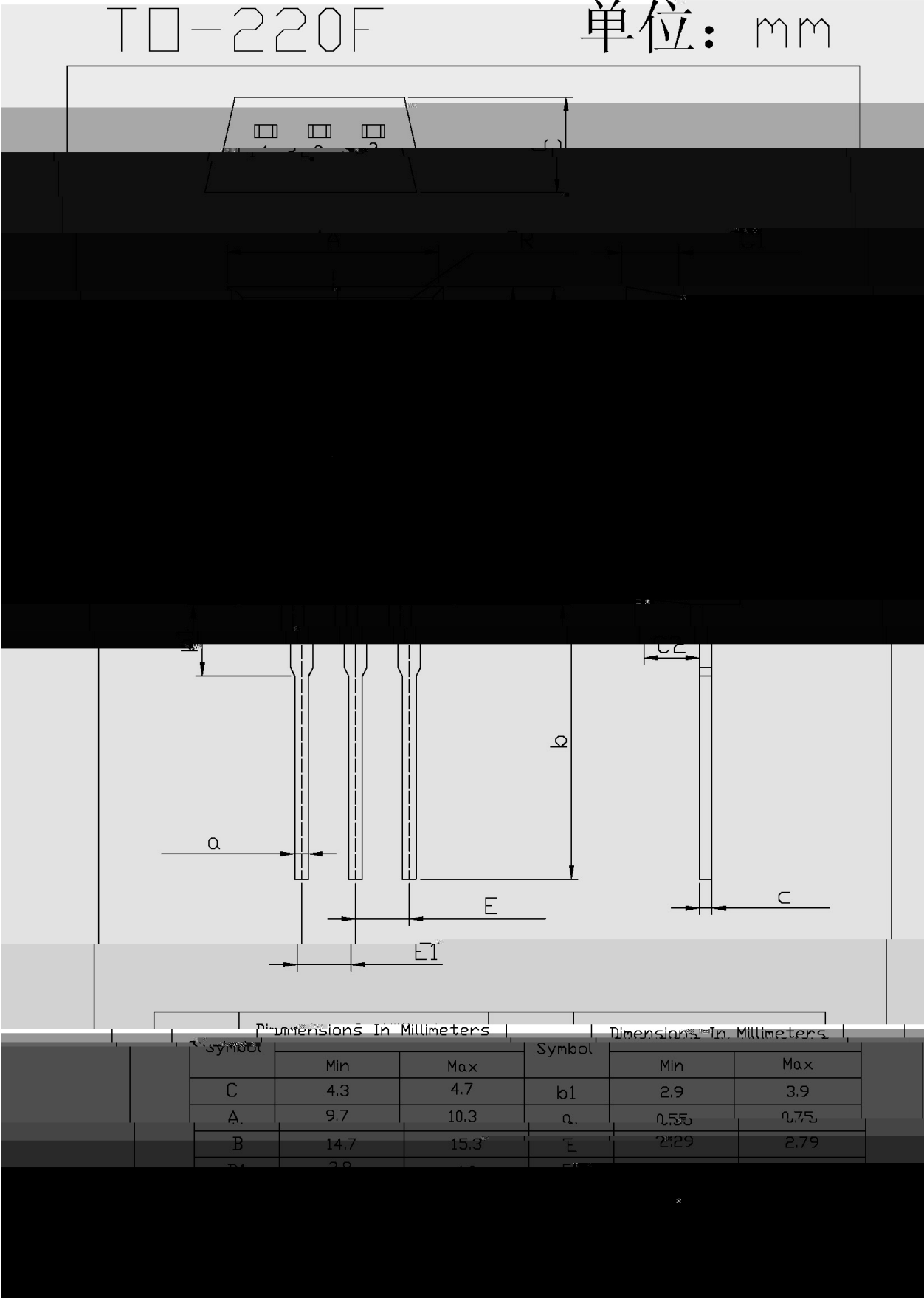
/ Electrical Characteristic Curve



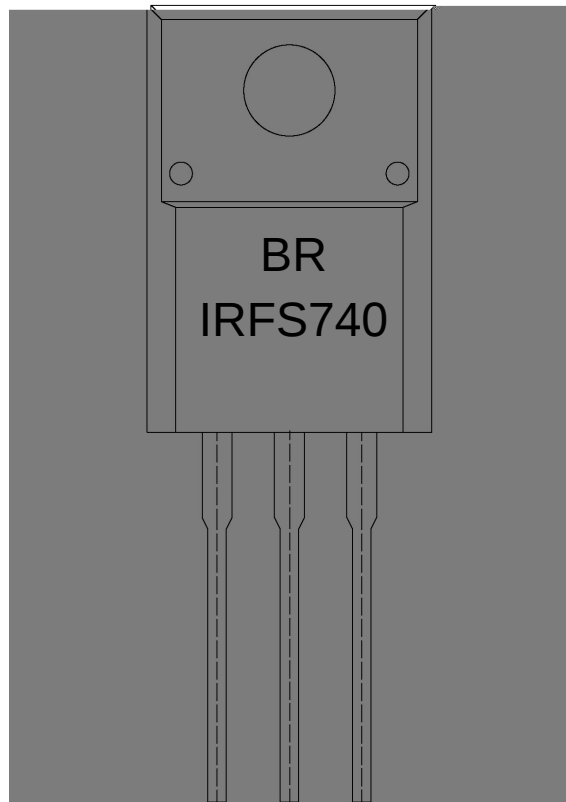
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



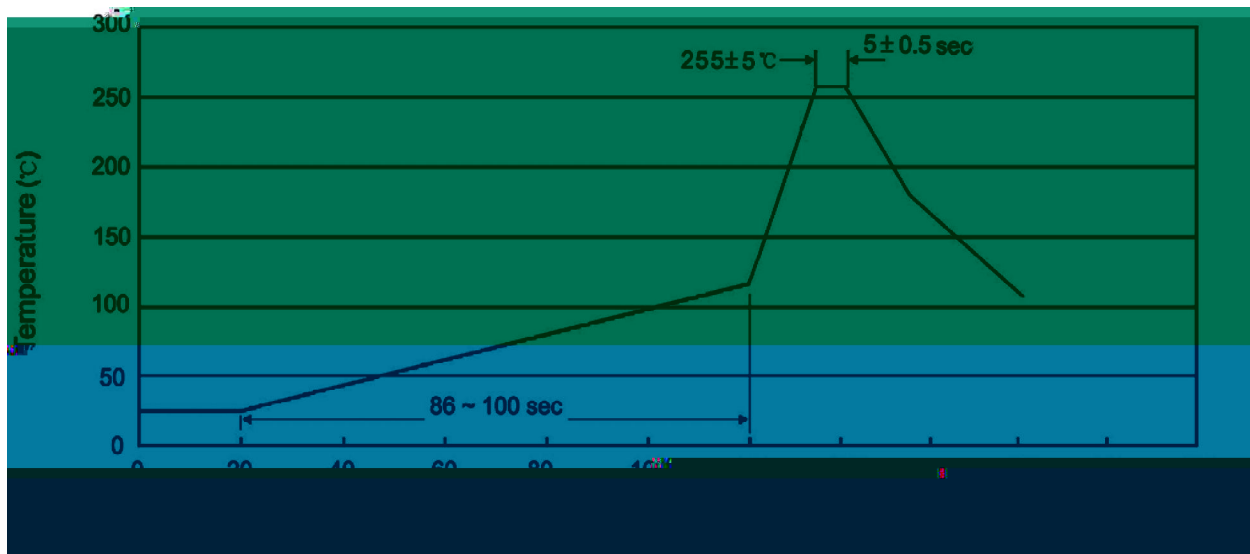
Note:

BR: Company Code

IRFS740: Product Type.

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

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



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. |

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp.:270±5℃ Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只套管	套管盒	只盒	盒箱	只箱	套管	盒	箱

/ Notices