BRCS630FA

Rev.A Sep.-2023

DATA SHEET

/ Descriptions

TO-220F N MOS

N-CHANNEL MOSFET in a TO-220F Plastic Package.

/ Features

V_{DS}=200V I_D=9A

$R_{DS(on)}$@10V0.4(Type.0.35)

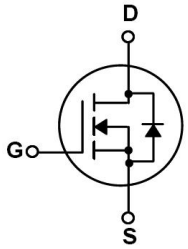
HF Product.

/ Applications

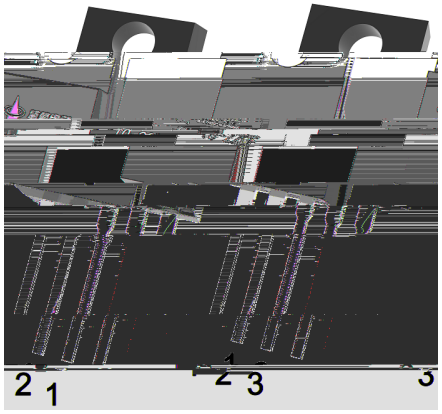
LED

Networking,Load Switch,LED applications.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S

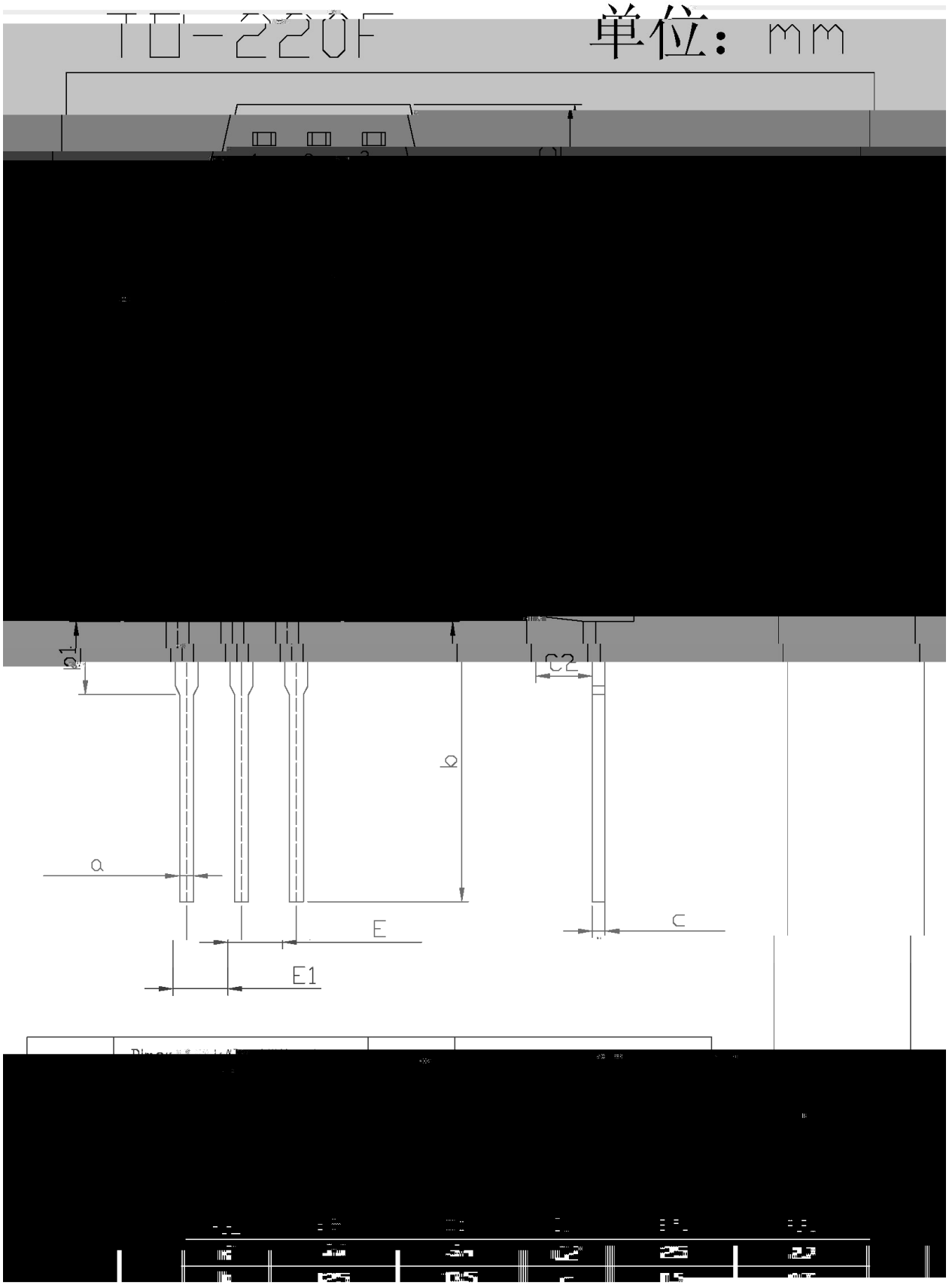
/ Marking

See Marking Instructions.

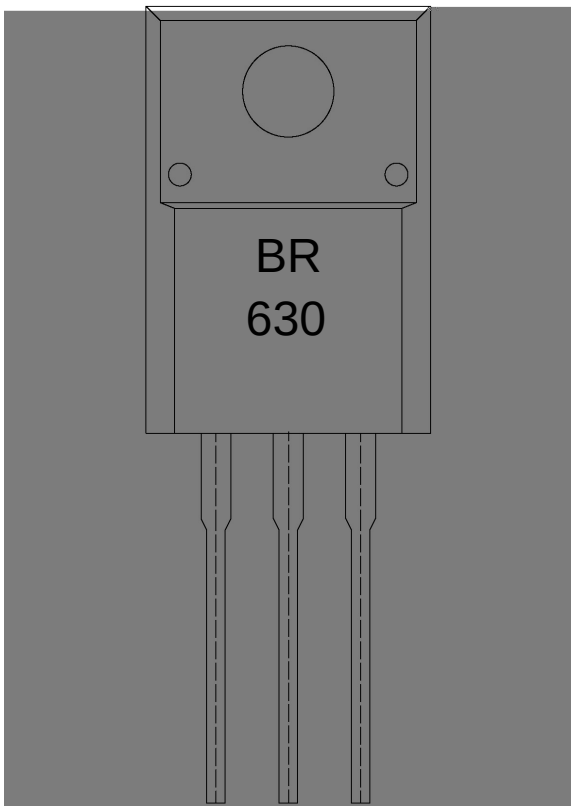
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=90V R_L=9.6Ω R_{GEN}=9.1Ω		15	32	ns
Turn-On Rise Time	t_r			33	53	
Turn-Off Delay Time	$t_{d(off)}$			40	55	
Turn-Off Fall Time	t_f			30	45	
Maximum Continuous Drain-Source Diode Forward Current	I_S				9	A
Maximum Pulsed Drain-Source Diode Forward Current	I_{SM}				36	A
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS} = 0 V, I_S = 9.0A			1.2	V
Reverse Recovery Time	t_{rr}	V_{GS} = 0V, I_S = 9.0A, dI_F/dt = 100 A/εs		455		nS
Reverse Recovery Charge	Q_{rr}			3.5		nC

/ Package Dimensions



/ Marking Instructions



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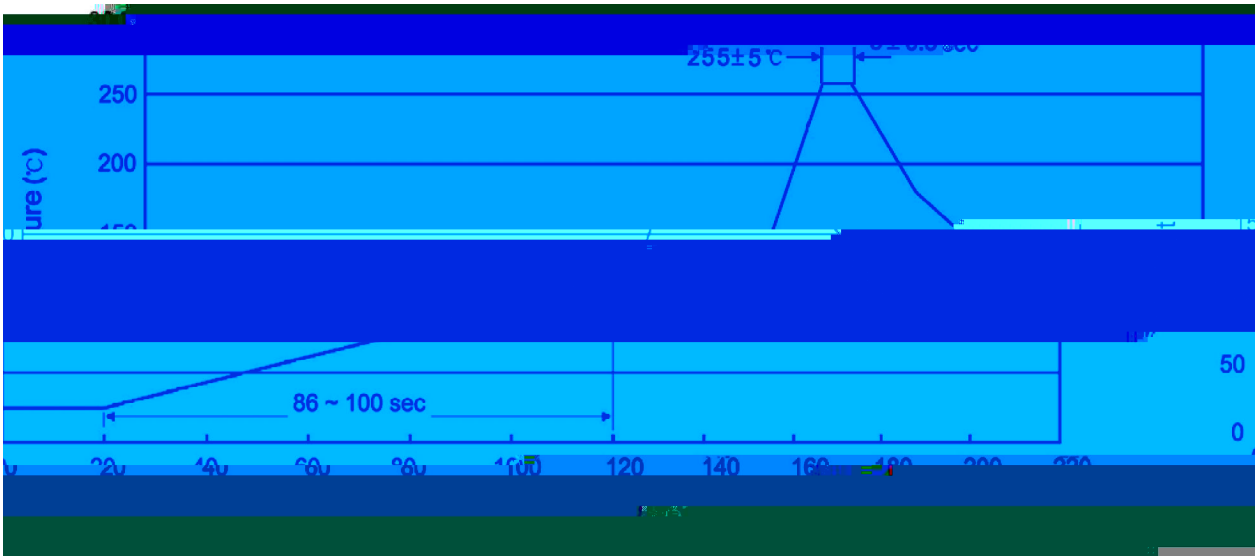
Note:

BR:	Company Code
630:	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	Units					Dimension		(unit mm³)
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension		(unit mm³)
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices