/ Descriptions

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

/ Features

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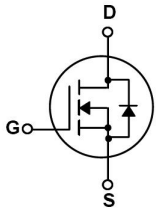
Low gate charge, low crss, fast switching.

/ Applications

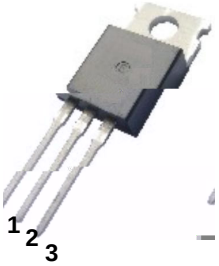
DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S

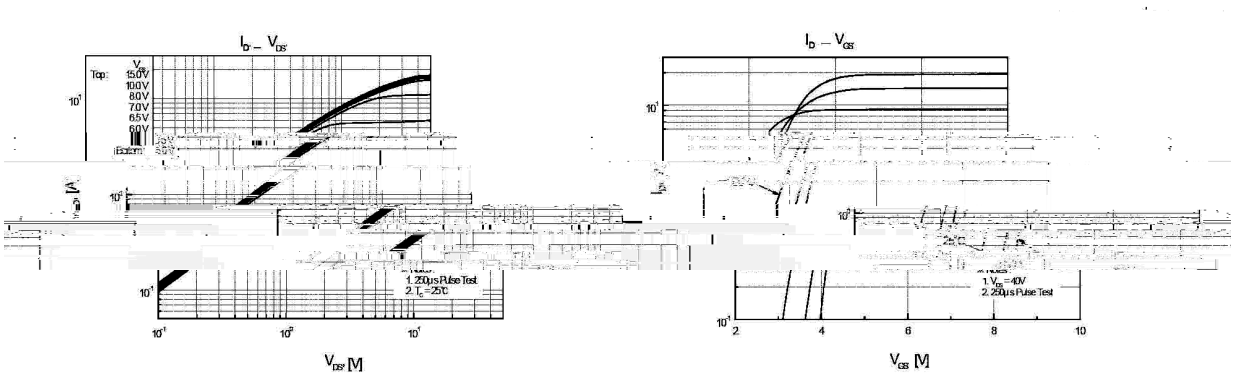
/ h_{FE} Classifications & Marking

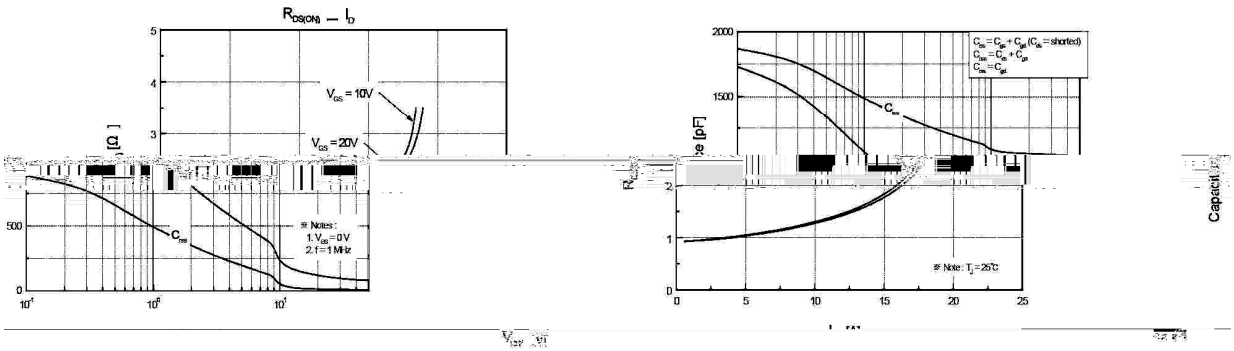
See Marking Instructions.

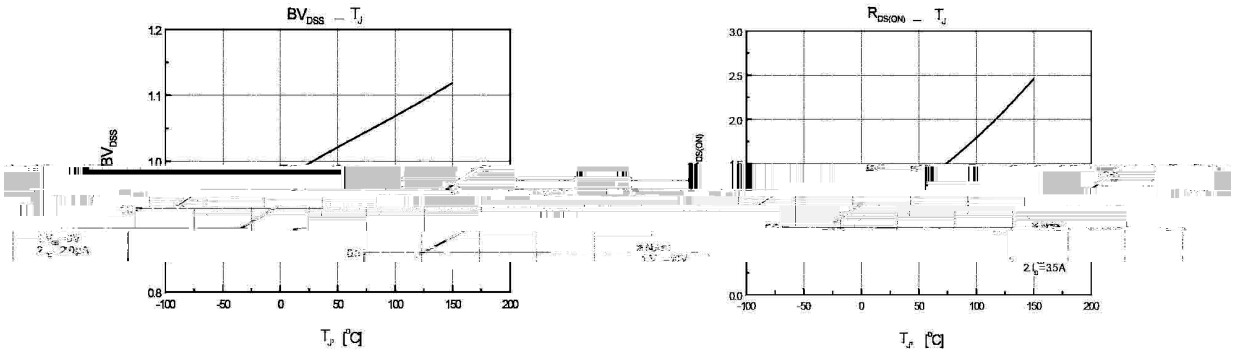
	Symbol	Rating	Unit
	V_{DSS}	650	V
	I_D(Tc=25)	7.0	A
	I_D(Tc=100)	4.4	A
	I_{DM}	28	A
	V_{GS}	±30	V
	E_{AS}	420	mJ
	E_{AR}	14.7	mJ
	I_{AR}	7.0	A
	P_D(Tc=25)	147	W
Range	T_J,T_{STG}	-55 to 150	℃

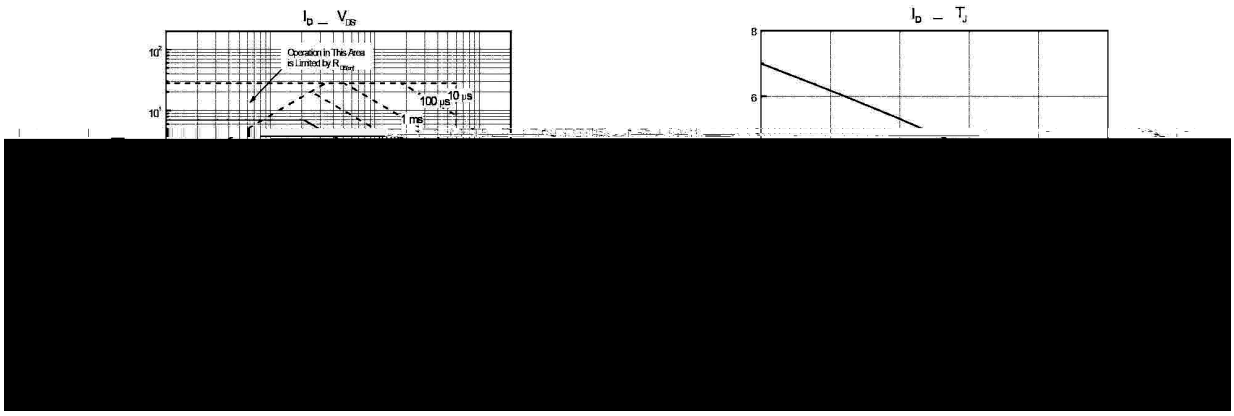
mbol	Test Conditions		Min	Typ	Max	Unit
V_{DSS}	V_{GS}=0V	I_D=250μA	650			V
DSS	V_{DS}=650V	V_{GS}=0V			1.0	μA
	V_{DS}=520V	T_C=125℃			100	μA
GSS	V_{GS}=±30V	V_{DS}=0V			±100	nA
GS(th)	V_{DS}=V_{GS}	I_D=250μA	2.0		4.0	V
DS(on)	V_{GS}=10V	I_D=3.5A			1.3	Ω
g_{FS}	V_{DS}=40V	I_D=3.5A		8.2		S
V_{SD}	V_{GS}=0V	I_S=7.0A			1.4	V
C_{iss}	V_{DS}=25V f=1.0MHz	V_{GS}=0V		1100	1500	pF
C_{oss}				110	150	pF

/ Electrical Characteristic Curve

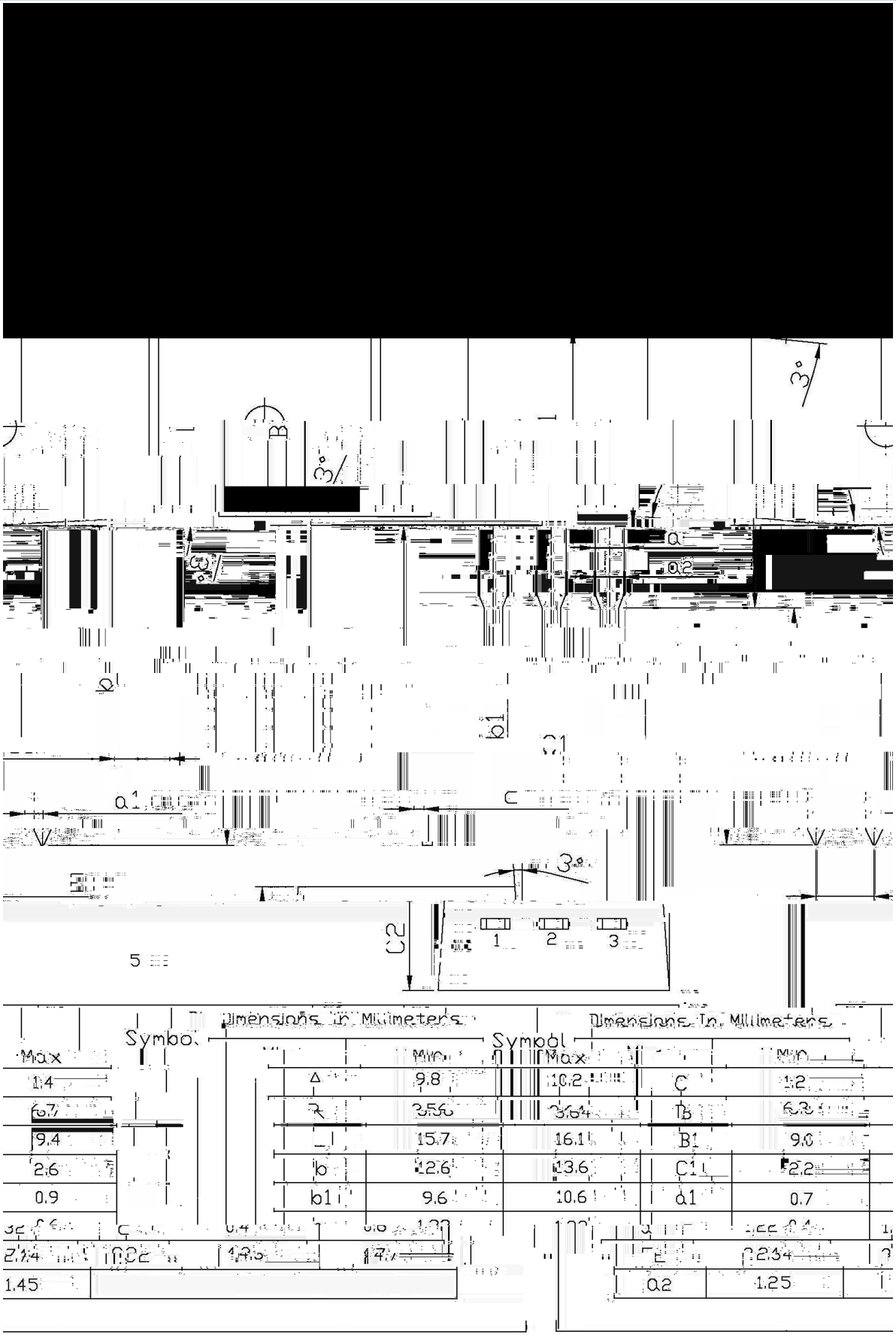




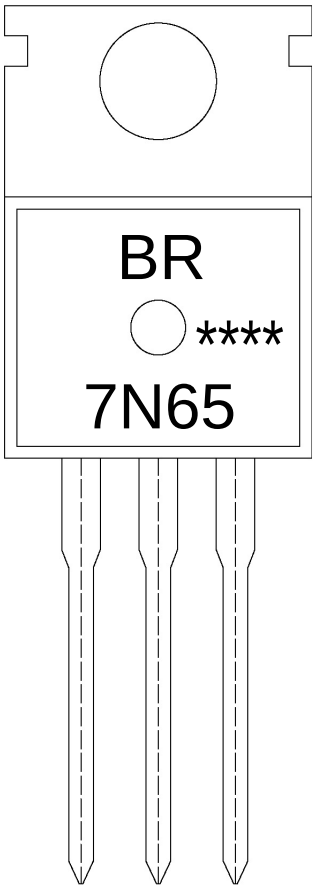




/ Package Dimensions



/ Marking Instructions



BR

7N65

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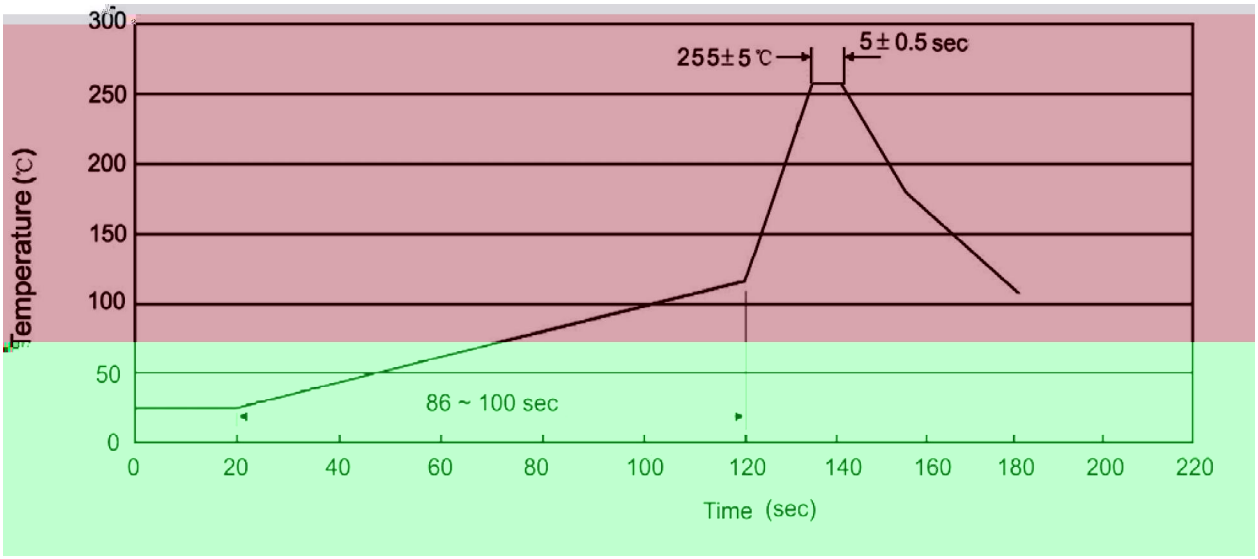
Note:

BR:	Company Code
7N65:	Product Type.
****:	Lot No. Code, code change with Lot No.

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



Note:

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