

@ f Parameter		... Z Symbol	f > Rating	% y Unit
Collector-Emitter Voltage		V _{CES}	650	V
Gate-Emitter Voltage		V _{GES}	f 30	V
Continuous Collector Current	T _C =25	I _C	80	A
	T _C =100		40	A
Pulsed Collector Current , Limited by T _{Jmax}		I _{CM}	160	A
Continuous Diode Forward Current	T _C =25	I _F	80	A
	T _C =100		40	A
Diode Repetitive Peak Forward Current		I _{FRM}	160	A
Short circuit withstand time		t _{sc}	9	us
Power Dissipation	T _C =25	P _D	395	W
Storage Temperature Range		T _{STG}	-55 to +175	
Maximum Temperature for Soldering		T _L	260	
Maximum Junction-to-Ambient		R _{JA}	40	/W

Maximum IGBT Junction-to-Case R_{JA} 35-8.4(R) T_J / T_{T3} 1 T_f 7.0172 0 0 7.02 338376 437.4803 T_m 0 T_c 0 T_w <021

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	td(on)	Tc=25		32		ns
		Tc=175		30		

Turn-On Rise Time

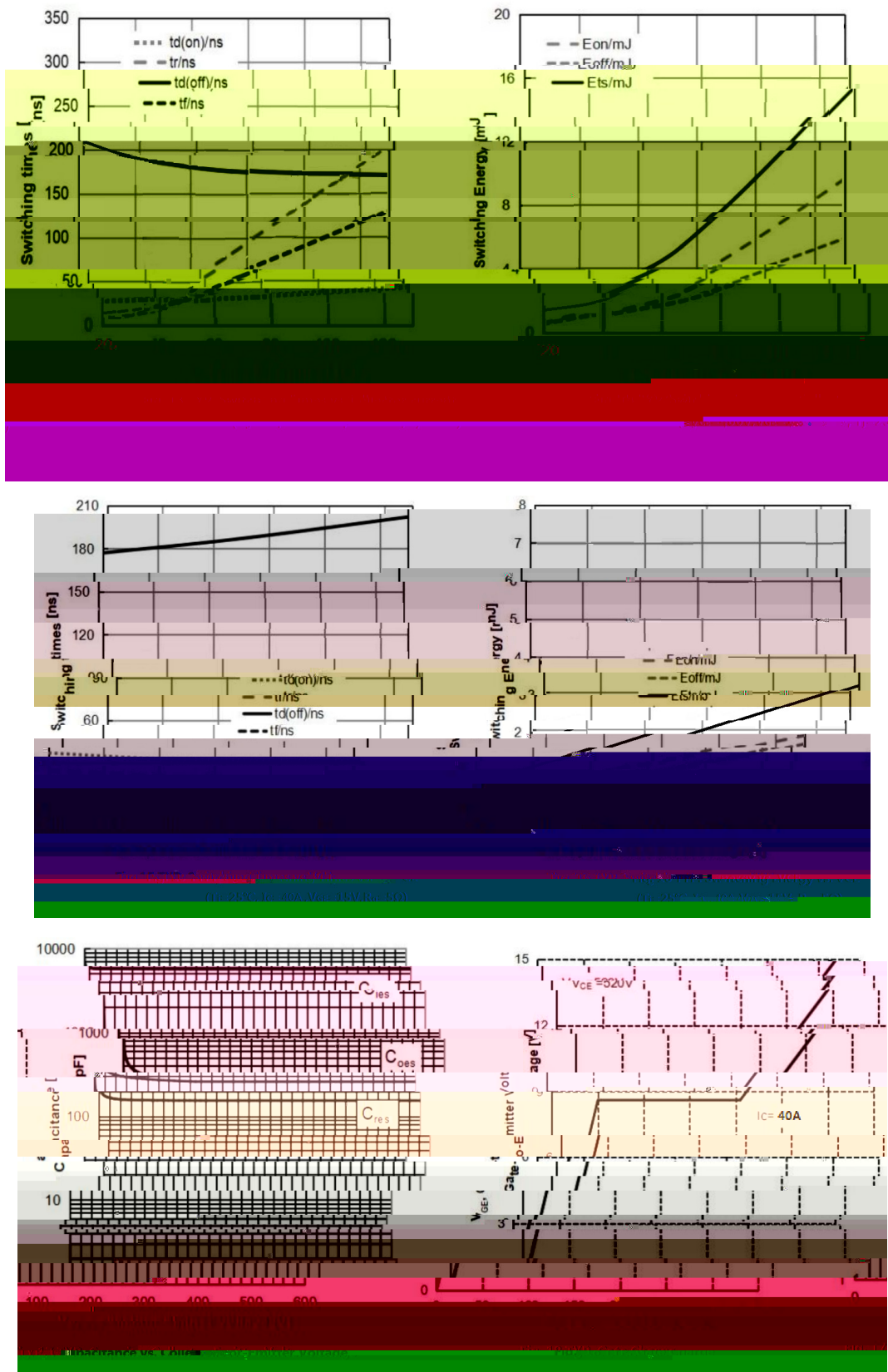
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$V_{GE}=15V,$
 $V_{CE}=400V$
 $I_C=40A,$
 $R_G=5$
Inductive
Load

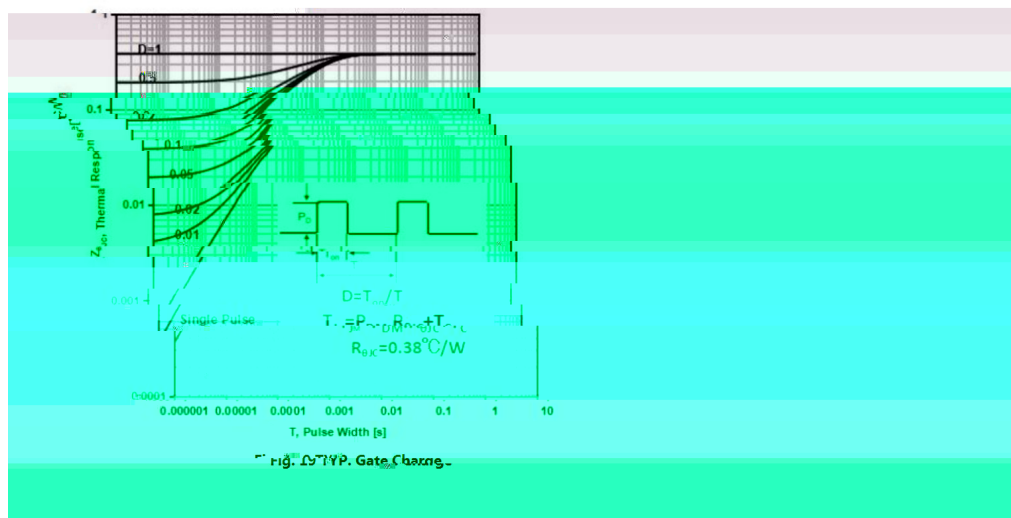
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〇 ? d • Ž ¢ / Electrical Characteristic Curve



Electrical Characteristic Curve



BRGB40N65AHA

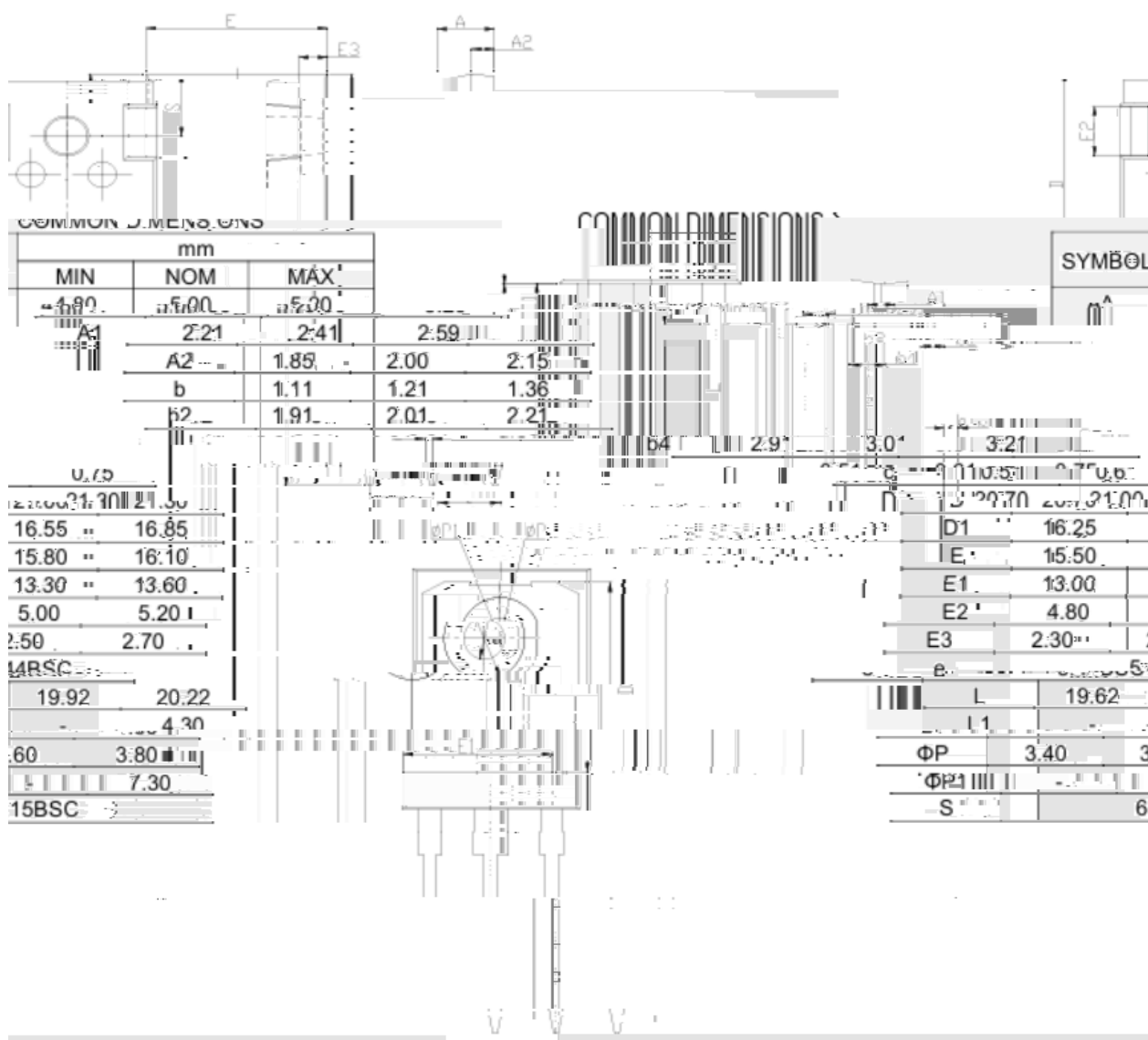
Rev.B May.-2026



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

Ø □ =) □ / Package Dimensions



, M y f / Marking Instructions



Marking Instructions

BR y [W A

- (4 ' . ' y ° Z W A

y ÿ D Z W A k š ÿ D Z J

Note:

BR: Company Code

GB40N65AHA: Product Type Code

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

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

^a Ć y

1o• Ä ½ “† 25 ½±150 - k ž • 60 ½±90sec;

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

3o•D N ò i Ò 0 , † 2 ½±10 - /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 Åmm³)
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