

5 é / Descriptions

TO-263 .> // x N ?ú 3 « | • 'ož

N-CHANNEL MOSFET in a TO-263 Plastic Package.

□ a / Features

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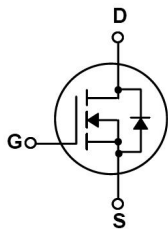
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Đ ÷ / Applications

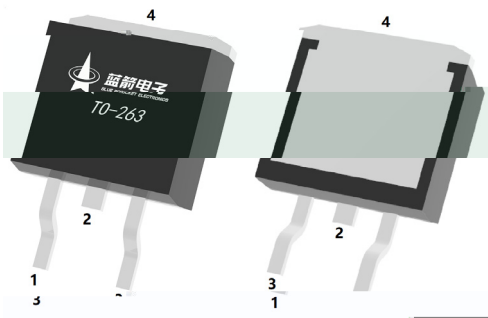
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These devices are well suited for high efficient switched mode power supplies Ë Active power factor correction, electronic lamp ballast based on half bridge topology.

Ã w] Ô • / Equivalent Circuit



• Ů - æ / Pinning



PIN1 y G

PIN 2o•4 y D

PIN 3 y S

, M V / Marking

• - ~ a ¢ož See Marking Instructions.

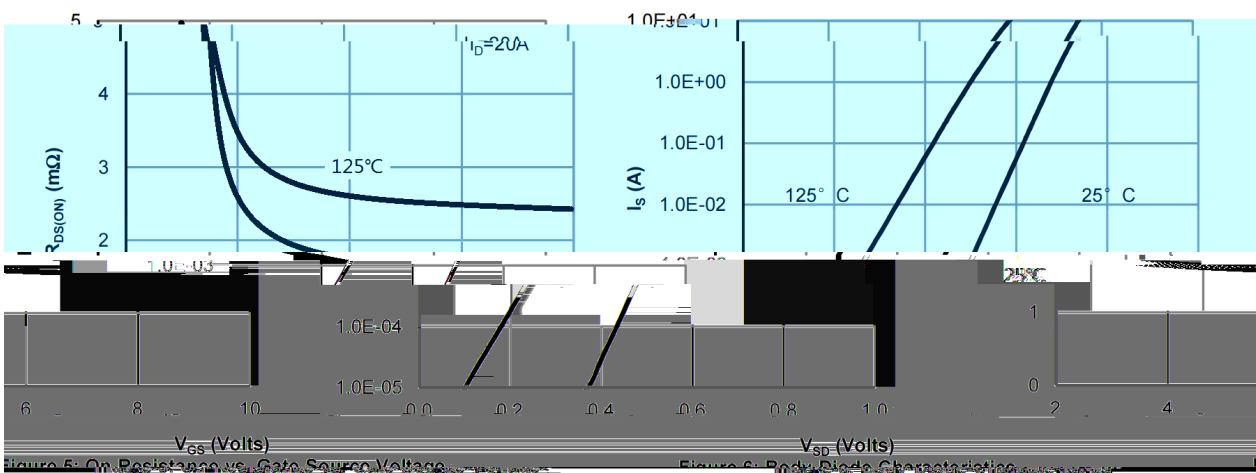
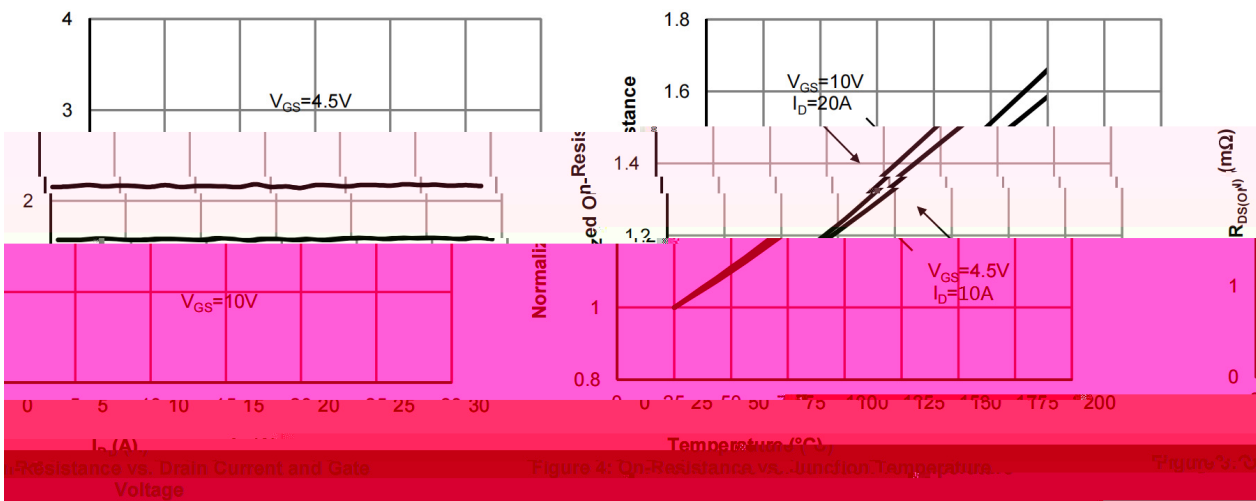
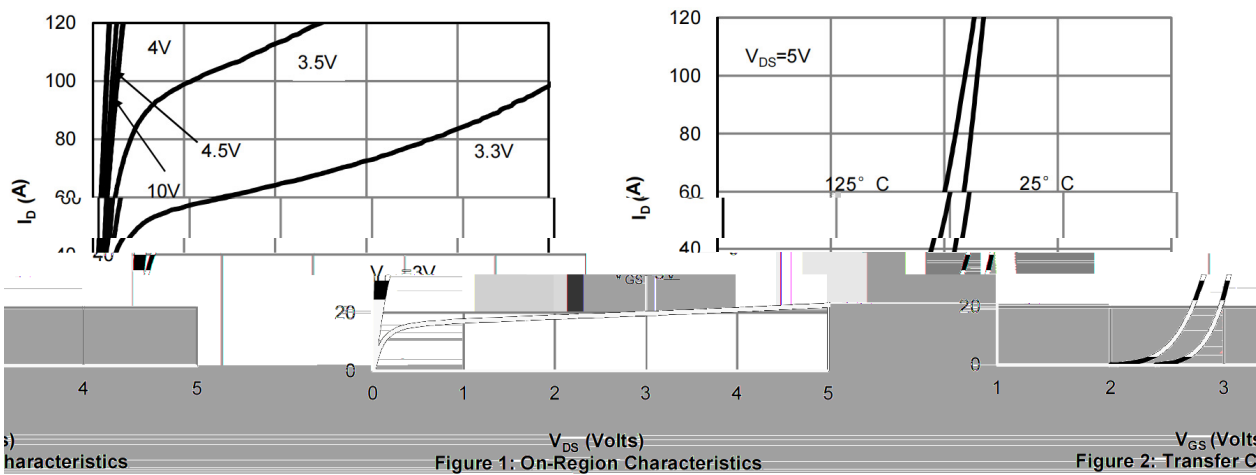
BRCS020N04BD

Rev.B Sep.-2022

@ f Parameter		... Z Symbol	f > Rating	% y Unit
Drain-Source Voltage		V _{DSS}	40	V
Drain Current		I _D (T _C =25 °C)	120	A
Pulsed Drain Current		I _{DM}	480	A
Gate-Source Voltage		V _{GS}	±20	V
Single Pulsed Avalanche Energy L=0.5mH		E _{AS}	482	mJ
Avalanche Current		I _{AS}	35	A
Total Power Dissipation		P _D (T _C =25 °C)	187	W
Junction and Storage Temperature Range		T _J , T _{STG}	-55 to 175	
Thermal Resistance-Junction to Ambient	t 0 10s	R _{θJA}	15	- /W

@ f	... Z
Parameter	

Electrical Characteristic Curve



Electrical Characteristic Curve

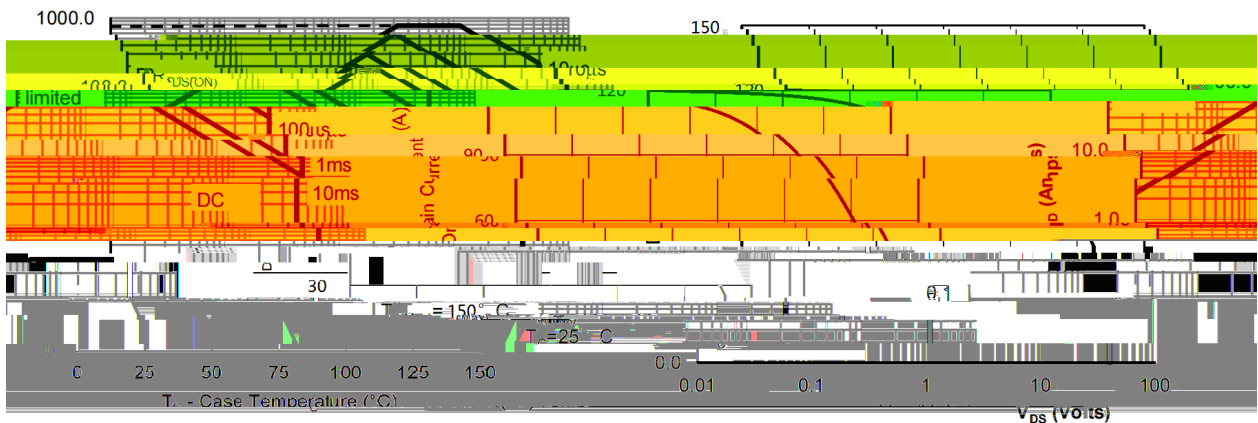
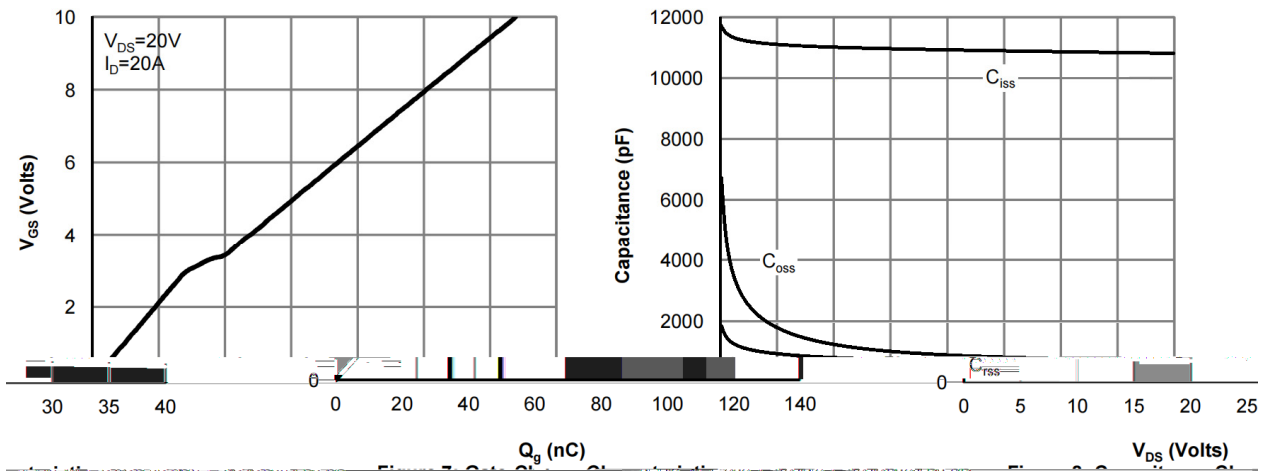


Figure10. Maximum Continuous Drain Current
vs Case Temperature

Figure 9: Maximum Forward Biased Safe
Operating Area

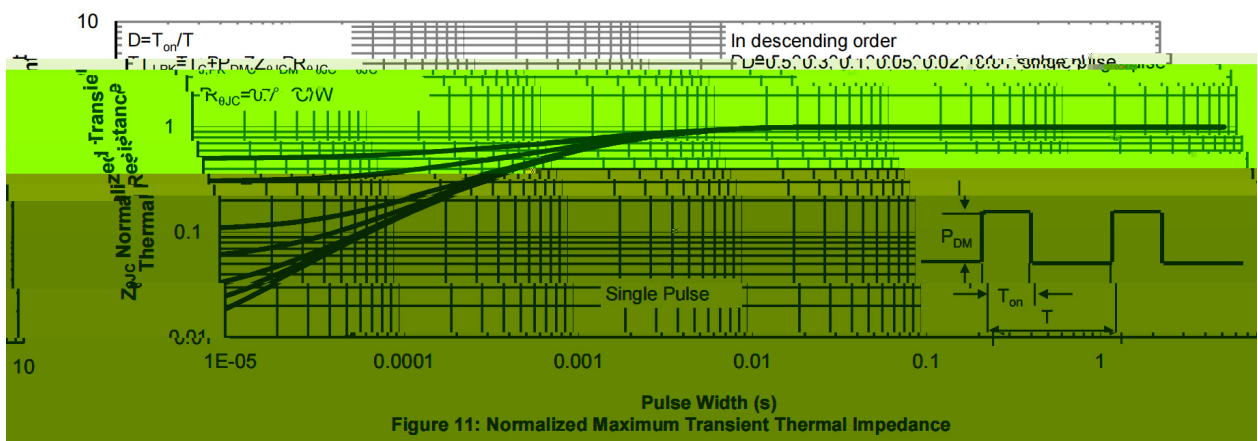


Figure 11: Normalized Maximum Transient Thermal Impedance

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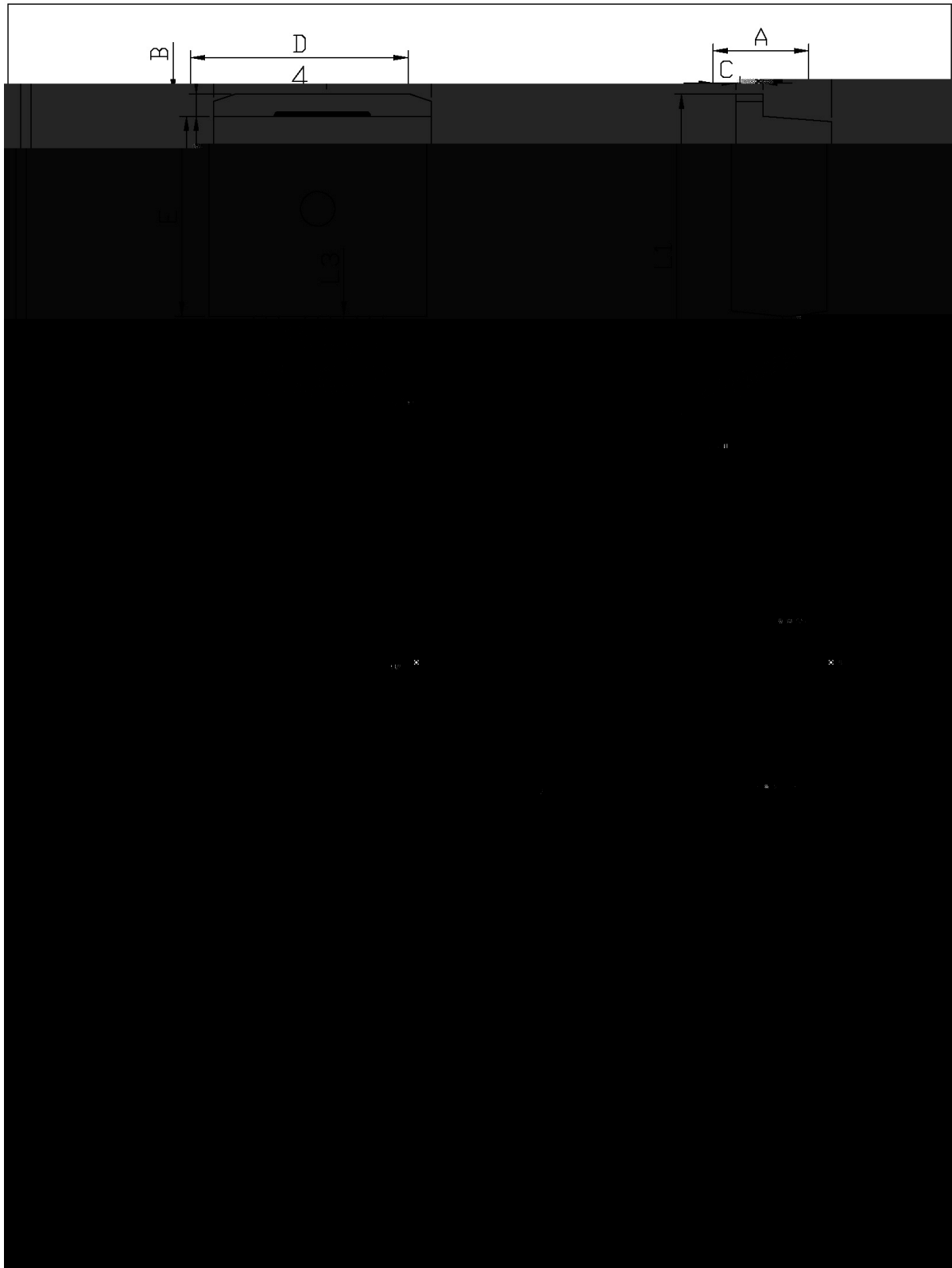
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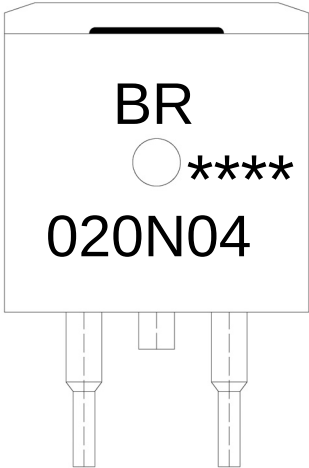
蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

Ø □ =) ⌀ / Package Dimensions



, M y f / Marking Instructions



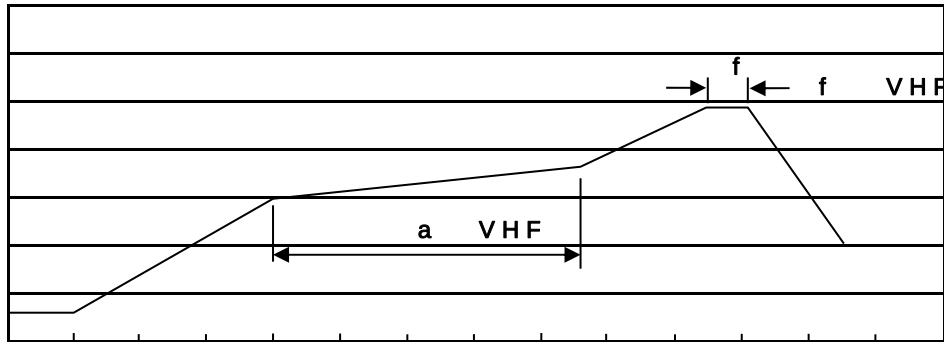
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(8 y , [W A
4 y ° Z W A
y Ÿ D Z W A k Š Ÿ D Z J

Note:
BR: Company Code
020N04: Product Type
****: Lot No. Code, code change with Lot No



šWD t...•Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

7HPSHUDWXUH



7LPH VHF

a ç y

10• Ä ½ “† 150 ½180 - k ž • 60 ½90sec;

20• Q > “† 245 r5 - k ž • 4 Ò 5 r0.5sec;

30•D N ò i Ò 0 ,† 2 ½10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »]

/ Resistance to Soldering Heat Test Conditions

“† y 260 r5 -

ž • y 10 r1 sec.

Temp.:260±5

Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û ĤH					Dimension ;>û p . (unit /mm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /lç	Units/Outer Box /lç	Reel	Inner Box	Outer Boxç
TO-263	800	1	800	6	4,800	13 s ×24	360×360×50	380×335×366

ì' x / TUBE

Package Type 7>û ~ E	Units ;>û ĤH					Dimension ;>û p . (unit /mm³)		
	Units/Tube /•1×	Tubes/Inner Box •1× /-	Units/Inner Box /-	Inner Boxes/Outer Box - /lç	Units/Outer Box /lç	Tube•1×	Inner Box	Outer Boxç
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

„Đ y f / Notices