

BRCS020N04BD

Rev.B Sep.-2022

5 é / Descriptions

TO-263 .> // x N ?ú 3 « | • 'ož

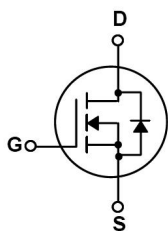
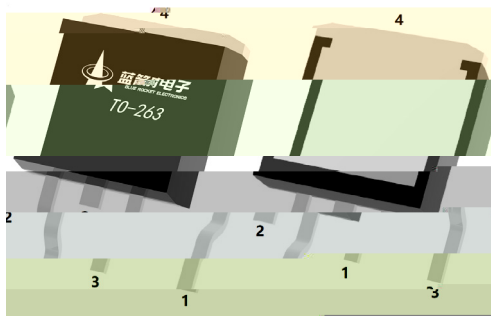
N-CHANNEL MOSFET in a TO-263 Plastic Package.

z Š •¼, † ½ k —)í D }ož

; R Z X G 2 U] 5 T 8 K Y O Y Z G T I K . , L 6 X U J [Y] D Z I N O T M

¥ ~ ^ 9 ä | > % ^ k " 6 ,) è y Â 9 ! " ÷ È ã ÿ - ° ož

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.



PIN1 y G

PIN 2o•4 y D

PIN 3 y S

, M V / Marking

• - ~ ^ ¢ ož See Marking Instructions.

@ f Parameter		... Z Symbol	f > Rating	% y Unit
Drain-Source Voltage		V _{DSS}	40	V
Drain Current		I _D (T _c =25)	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)	187	W
Junction and Storage Temperature Range		T _J ,T _{STG}	−55 to 175	
Thermal Resistance-Junction to Ambient	t 0 10s Steady-St to Ambient	R _{θJA}	15 W 2 S R'! — 48.48 # 5Ue d h' `Utd #`	

@ f
Parameter

... Z
SymbolT

Electrical Characteristic Curve

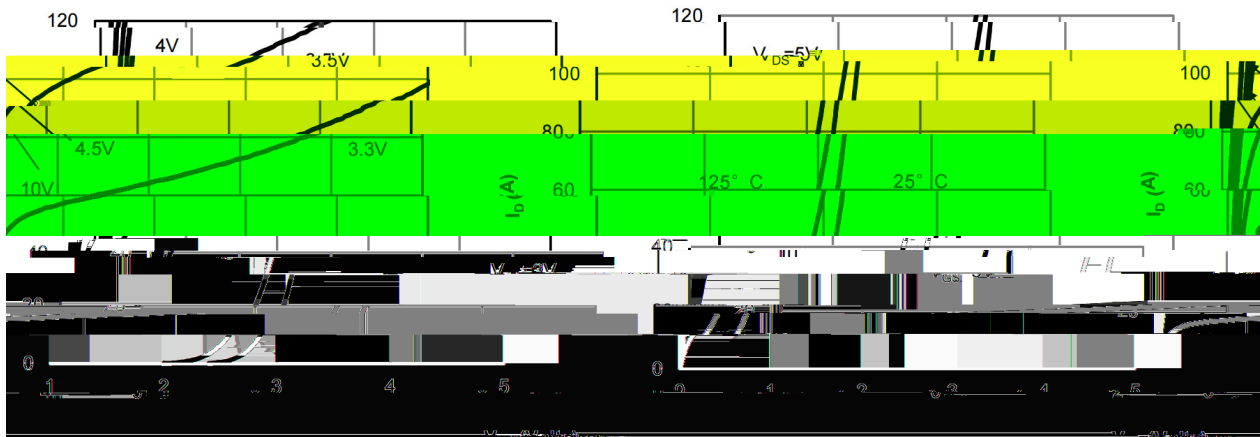
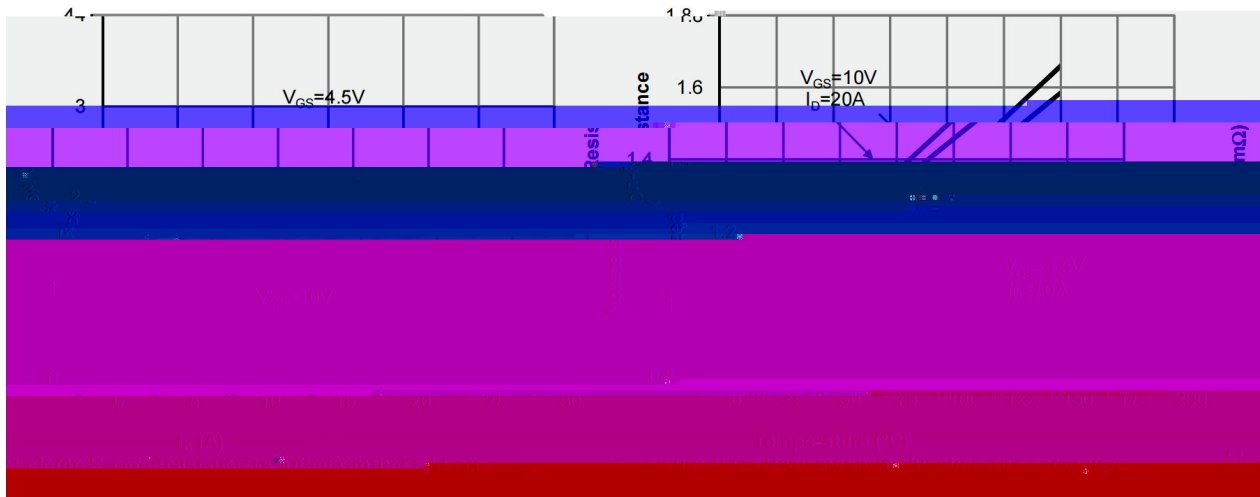
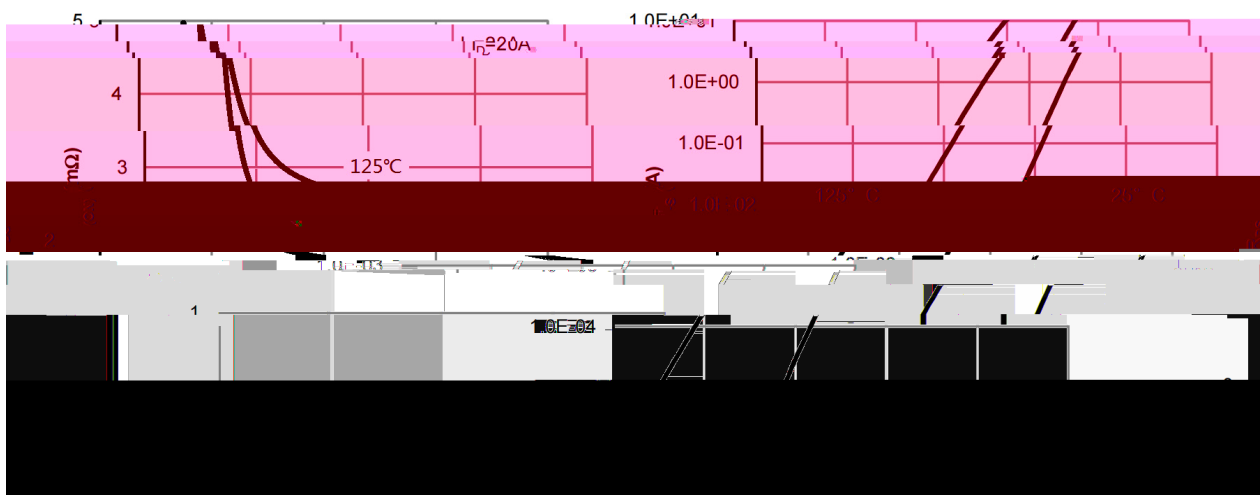
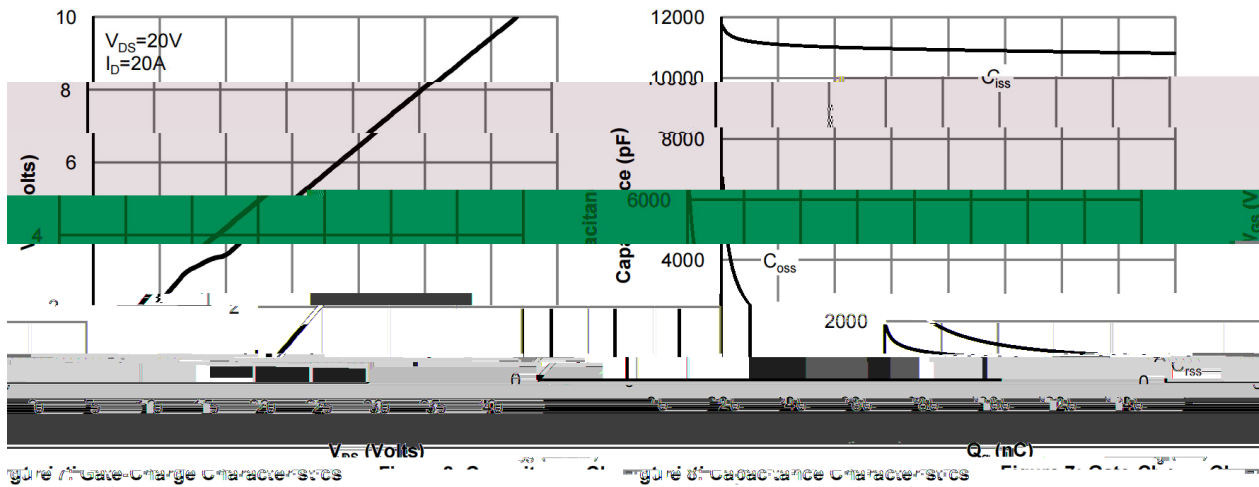
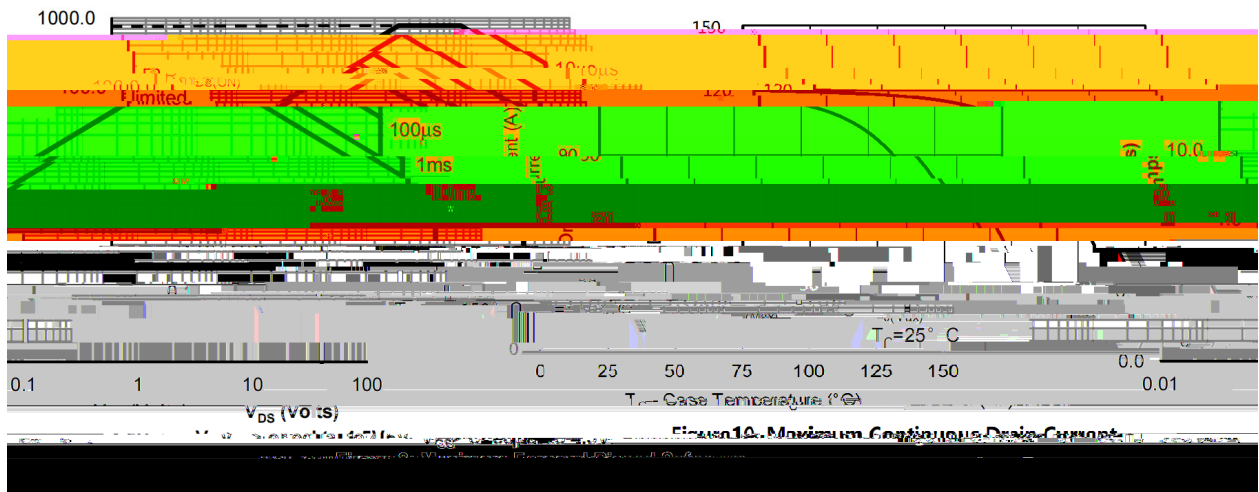
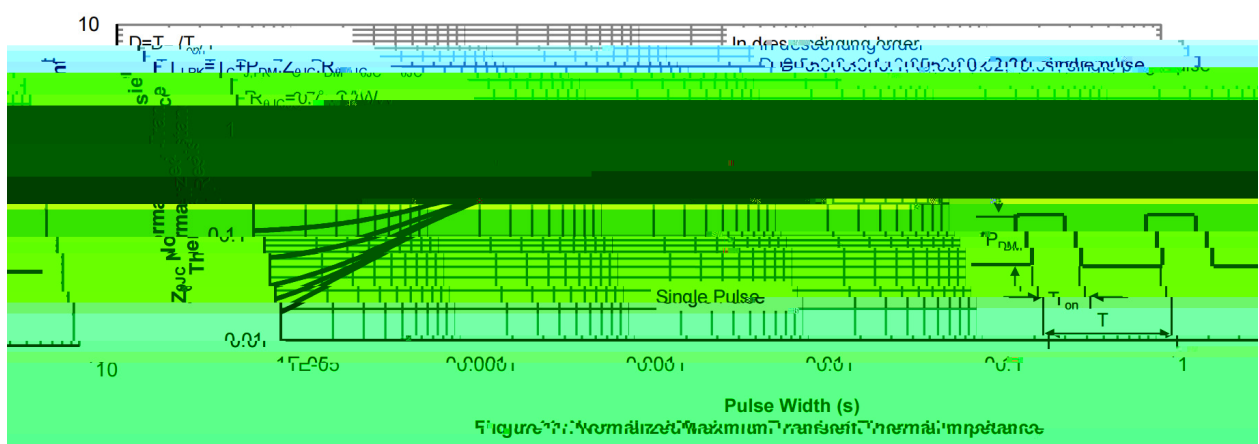


Figure 2: Transfer Characteristics

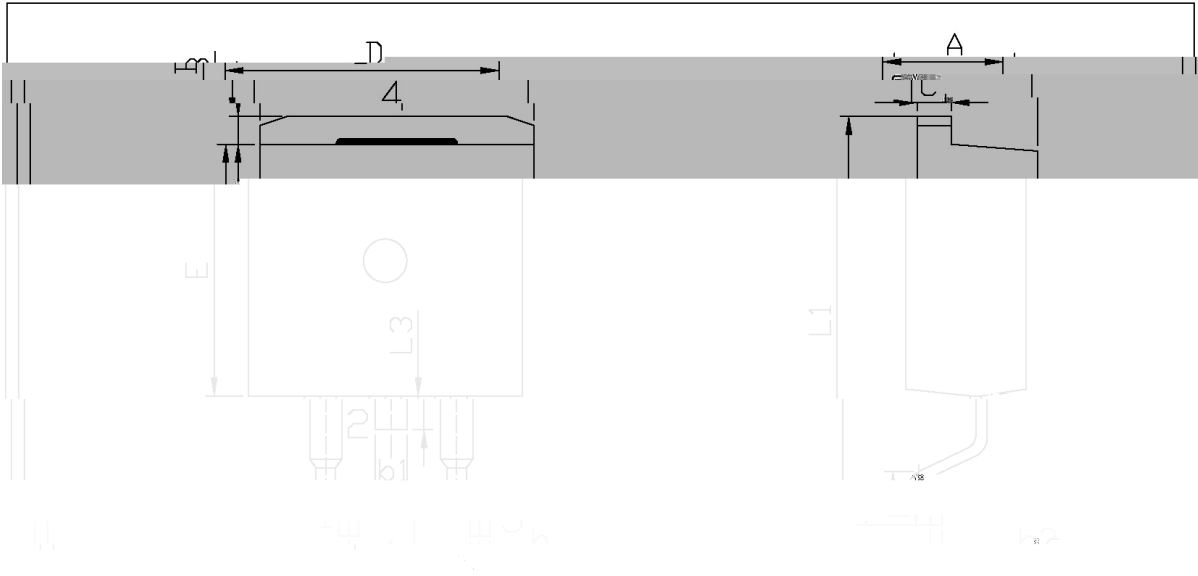
Figure 1: On-Region Characteristics



Electrical Characteristic Curve

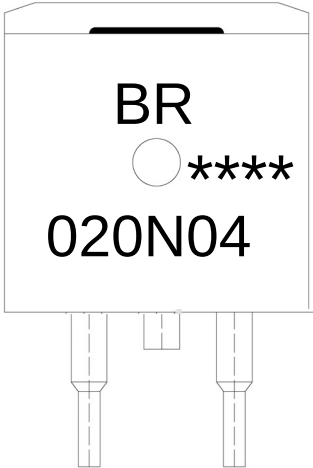


Ø □ =) ☎ / Package Dimensions



Max		Min		Max		Min	
9.40	A	4.30	4.70	E	9.00		
2.74	B	1.00	1.40	e1	2.34		
16.00	b1	1.15	1.35	L1	15		
2.84	b2	0.40	0.60	L2	2.4		
1.60	C	1.20	1.40	L3	1.2		
	D	9.30	10.20				
T0-263							

, M y f / Marking Instructions



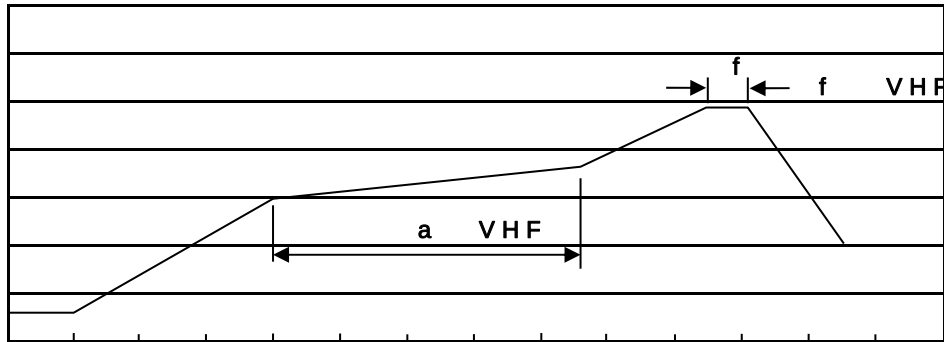
^ ¢ y
(8 y , [W A
4 y ° Z W A
y ŷ D Z W A k š ŷ D Z J

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	532×37×7.0	55×164×50	575×290×180

„Đ y f / Notices