

BRCS100N10SBD

Rev.A Jun.-2024

5 é / Descriptions

TO-263 .> / N?ú 3 « | • 'ož N-CHANNEL MOSFET in a TO-263 Plastic Package.

¤ ª / Features

$V_{DS}=100V$ $I_D=65A$

$R_{DS(ON)}@10V$ 0.10m (Typ.9m)

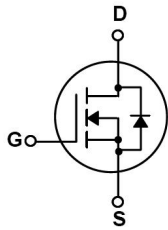
$R_{DS(ON)}@4.5V$ 0.15m (Typ.11m)

—)í D }ož HF Product.

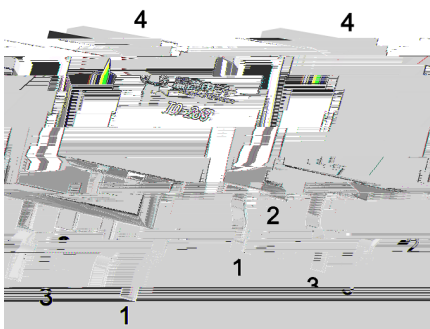
Đ ÷ / Applications

¥ ~ ^ 9 ä | > % ^ k " 6 ,) è y Áfficient - vřřehý modřl tož have typicallý Active power factor correction, electronic lamp ballast based on half bridge topology.

Ã W] Ô . / Equivalent Circuit



• Ů - æ / Pinning



PIN 1 y G

PIN 2 • 4 y D

PIN 3 y S

, M V / Marking

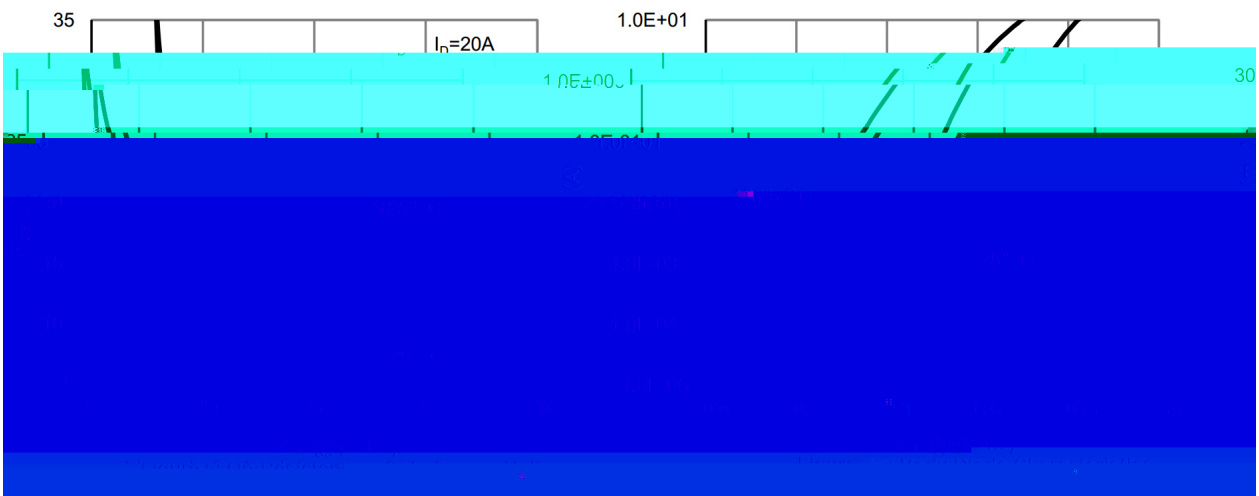
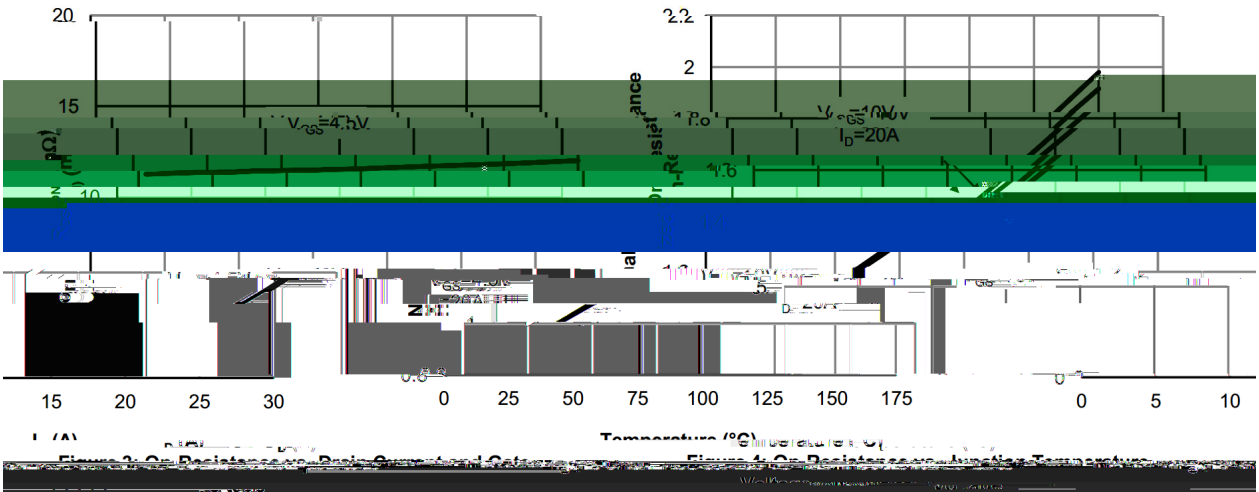
• - ~ ª ¢ož

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	100	V
Drain Current	$I_D(T_c=25^\circ C)$	65	A
Pulsed Drain Current	I_{DM}	168	A
Gate-Source Voltage	V_{GS}	f 20	V

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	t _{d(on)}	V _{GS} =10V V _{DS} =50V R _L =2.5 R _{GEN} =3		8.7		ns
Turn-On Rise Time	t _r			3.5		
Turn-Off Delay Time	t _{d(off)}			25		
Turn-Off Fall Time						

Electrical Characteristic Curve



Electrical Characteristic Curve

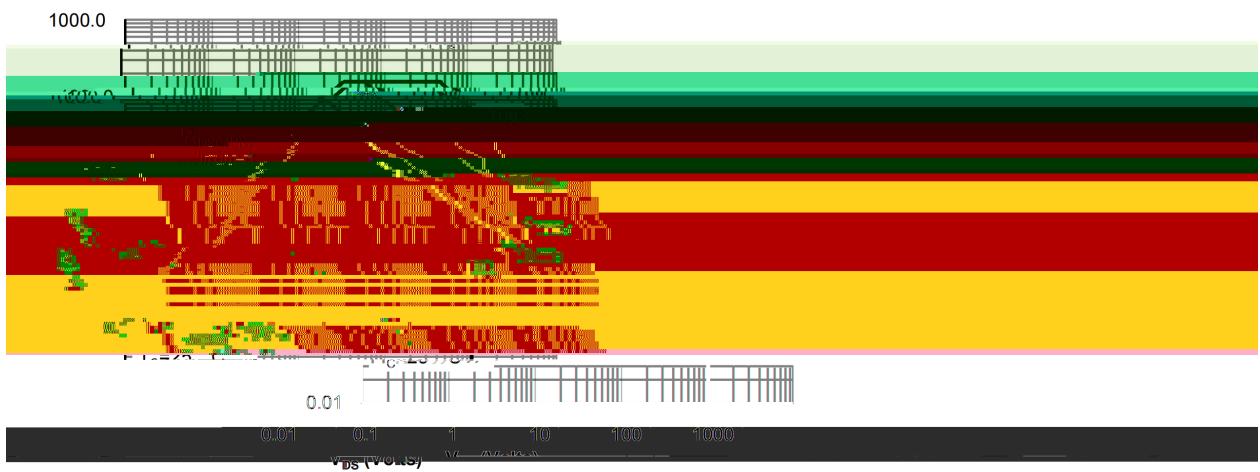
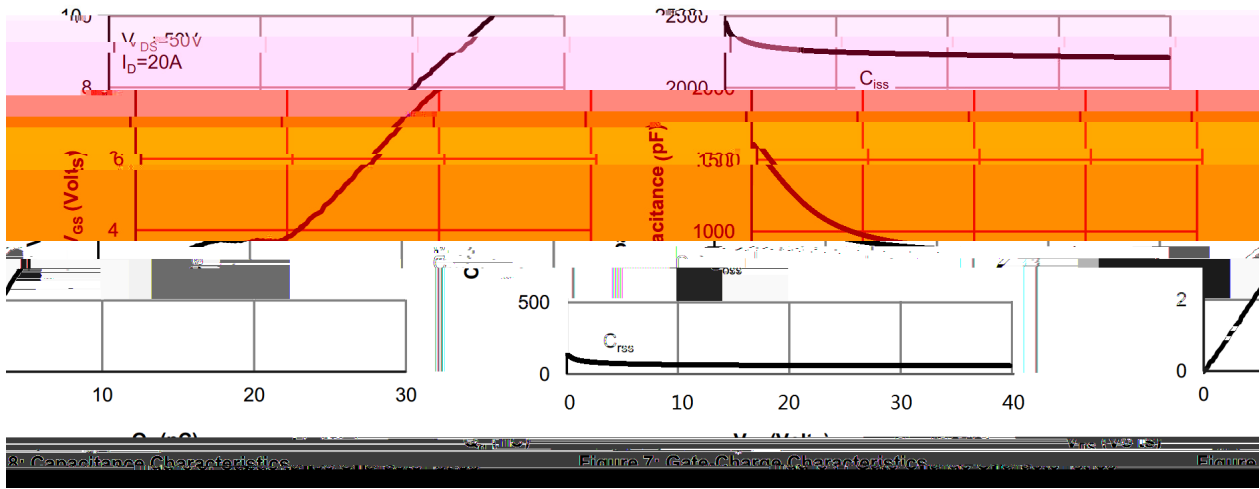


Figure 9: Maximum Forward Biased Safe Operating Area

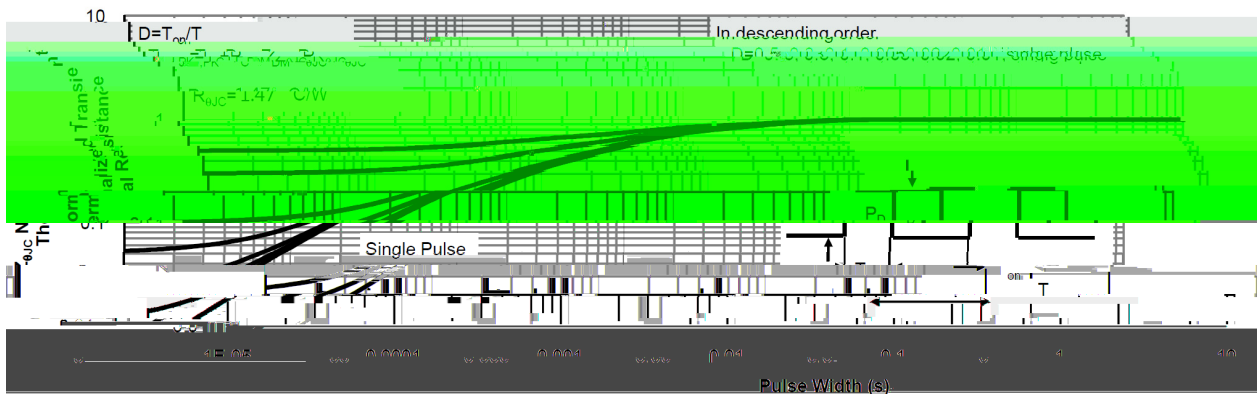
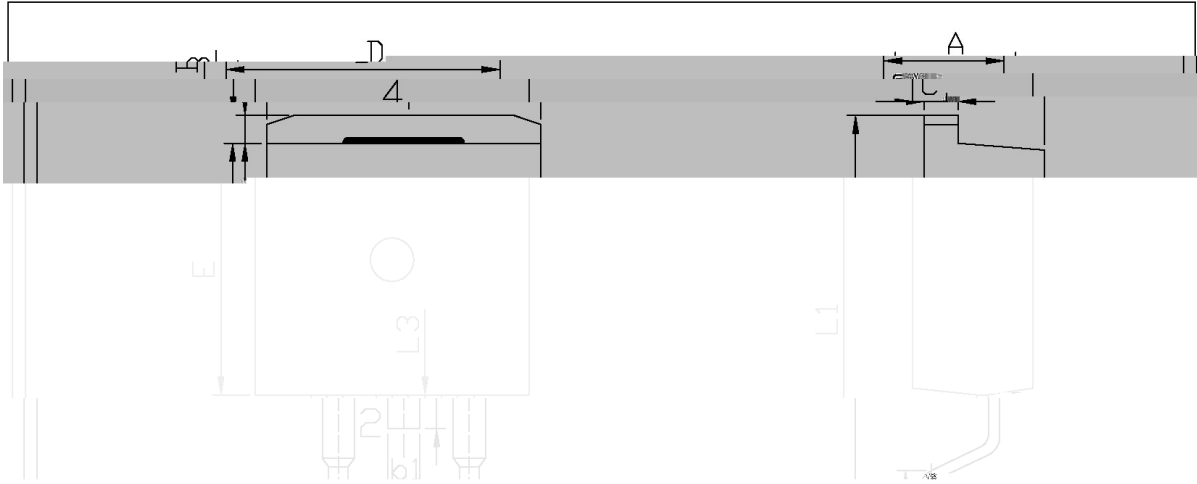


Figure 10: Normalized Maximum Transient Thermal Impedance

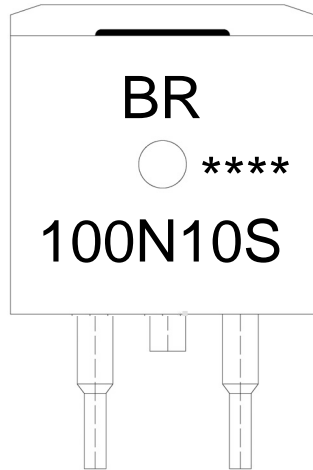
∅ □ =) ∅ / Package Dimensions



Max	Min	Max	Min
9.40	4.30	4.70	9.00
2.74	1.00	1.40	2.24
16.00	b1	1.15	1.35
2.84	b2	0.10	0.60
1.60	C	1.20	1.40
	D	9.80	10.20
	L1		15
	L2		2.2
	L3		1.2
	e1		



, M y f / Marking Instructions



BR

100N10S

Note:

- BR: Company Code
- 100N10S: Product Type Code
- ****: Lot No. Code, code change with Lot No



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

^açy

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

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

3•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

605 r5 - (/ -5.7(Park) 5.1266(SBP) 5.0116(Te) F4.3/1 Bx03.4485 32.3713 TD .0004 Tc -35.6 5309:602
† † †