BRCS100N10SBD

Rev.A Jun.-2024

DATA SHEET

5 é / Descriptions

TO-263 .> / /Ν?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)

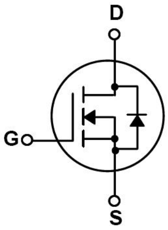
$R_{DS(ON)}$@4.5V 0 15m (Typ.11m)

—)í D }ož HF Product.

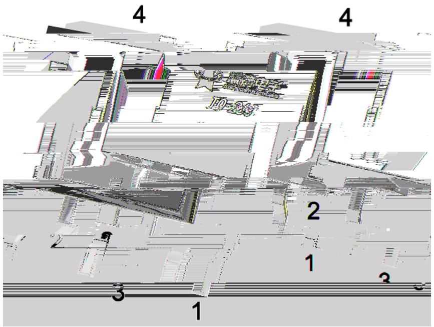
Ð ÷ / Applications

¥˜^ 9ä| ›%²k ” 6,) èy Efficient switched mode power supplies. These devices are well suited for high power factor correction, electronic lamp ballast based on half bridge topology.

Ã W] Ô · / Equivalent Circuit



• Û - æ / Pinning



PIN1 y G PIN 2o•4 y D PIN 3 y S

, M V / Marking

• - ~ ª ¢ož

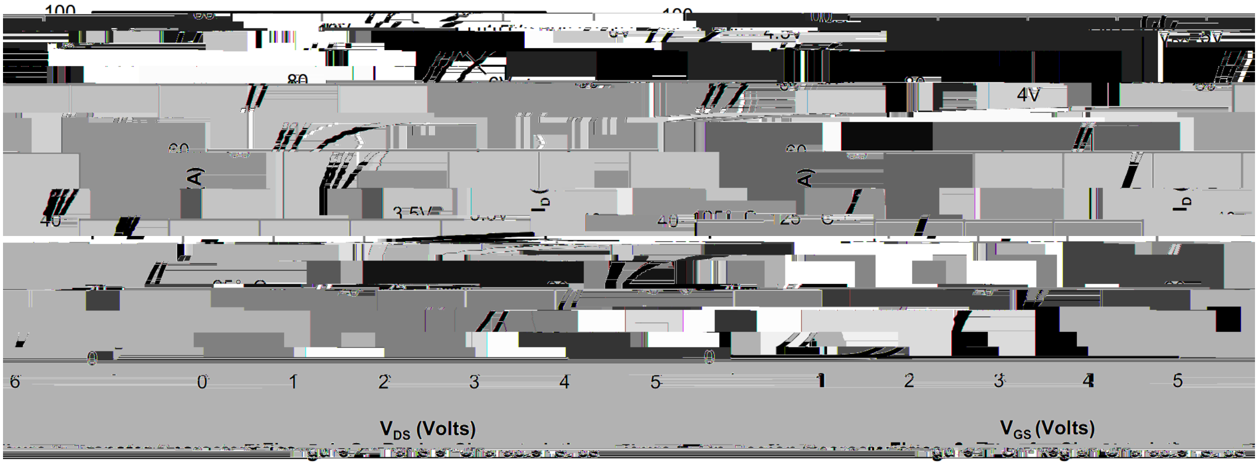
See Marking Instructions.

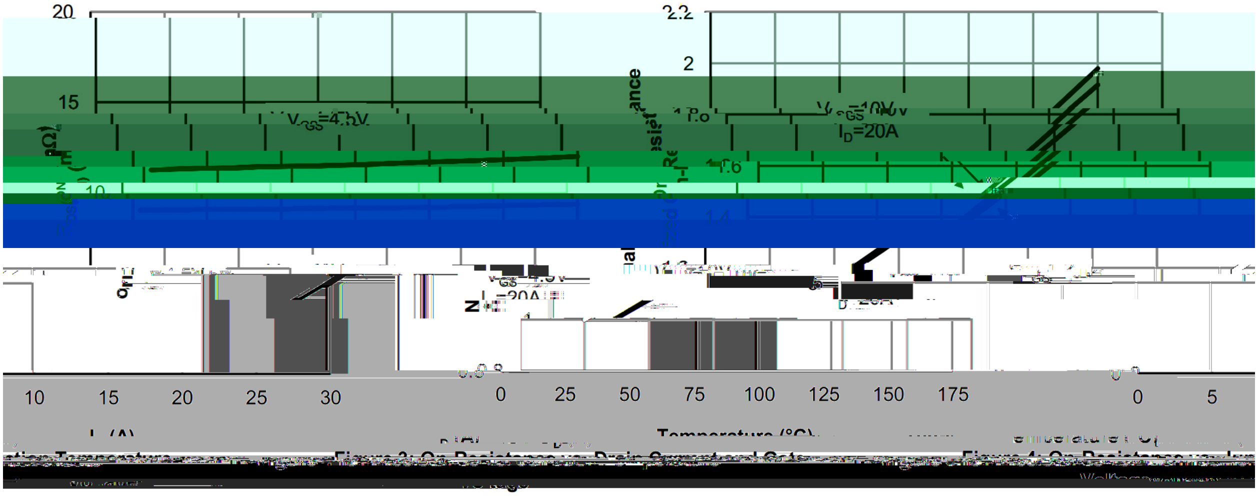
@ ƒ Parameter	… Z Symbol	ƒ › Rating	% y Unit
Drain-Source Voltage	V_{DSS}	100	V
Drain Current	I_D(Tc=25)	65	A
Pulsed Drain Current	I_{DM}	168	A
Gate-Source Voltage	V_{GS}	f 20	V

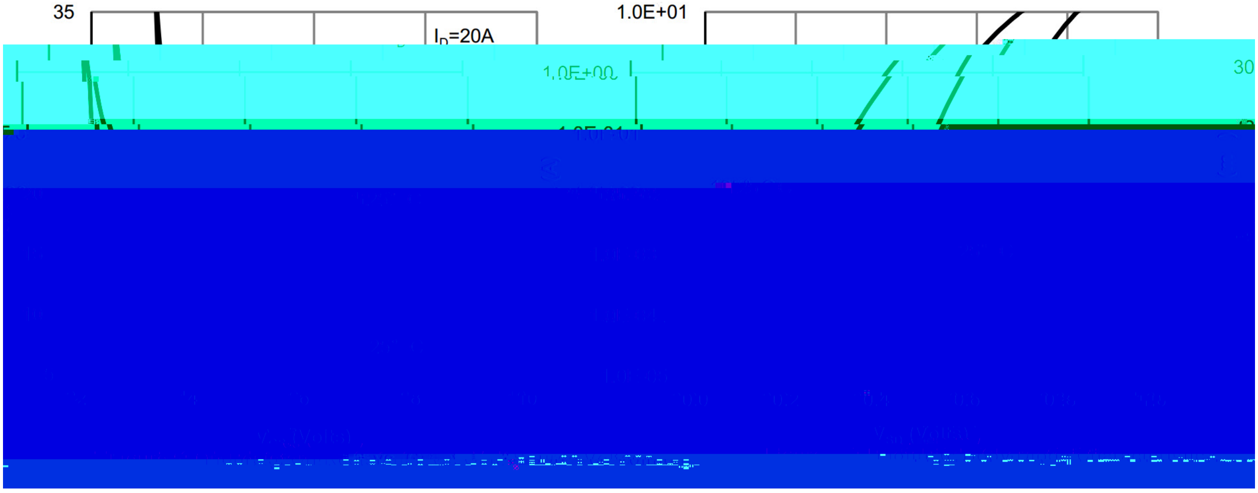
@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=50V R_L=2.5 R_{GEN}=3		8.7		ns
Turn-On Rise Time	t_r			3.5		
Turn-Off Delay Time	$t_{d(off)}$			25		

Turn-Off Fall Time

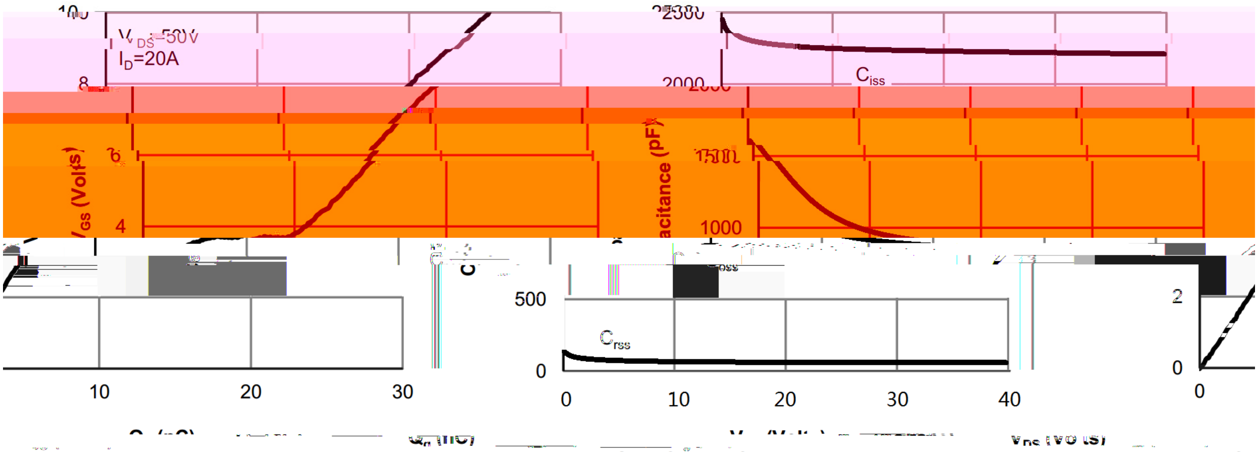
Ô ? d • Ž ¢ / Electrical Characteristic Curve







Ô ? d • Ž ¢ / Electrical Characteristic Curve



pacitance Characteristics Figure 7: Gate-Charge Characteristics Figure 8: Ca

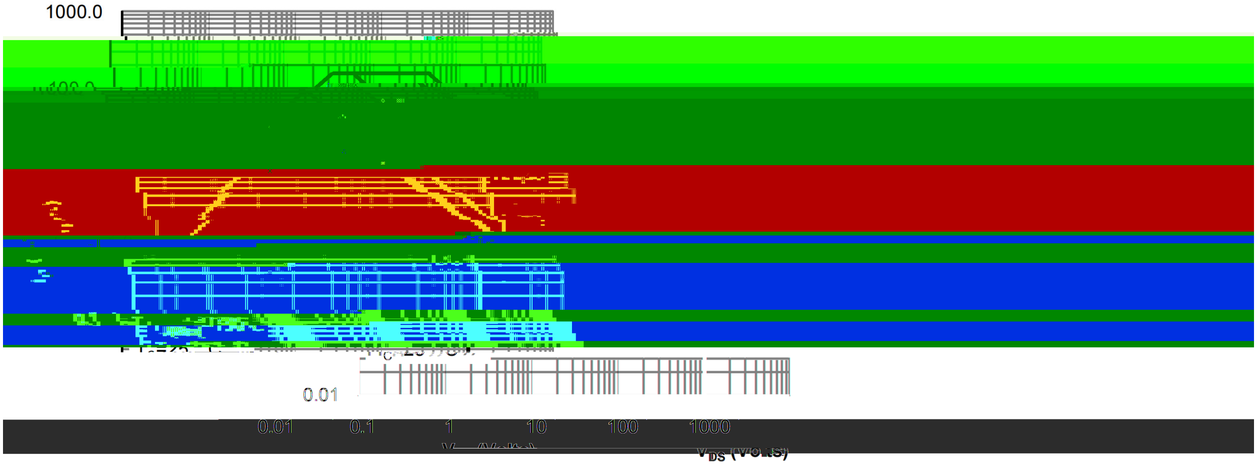
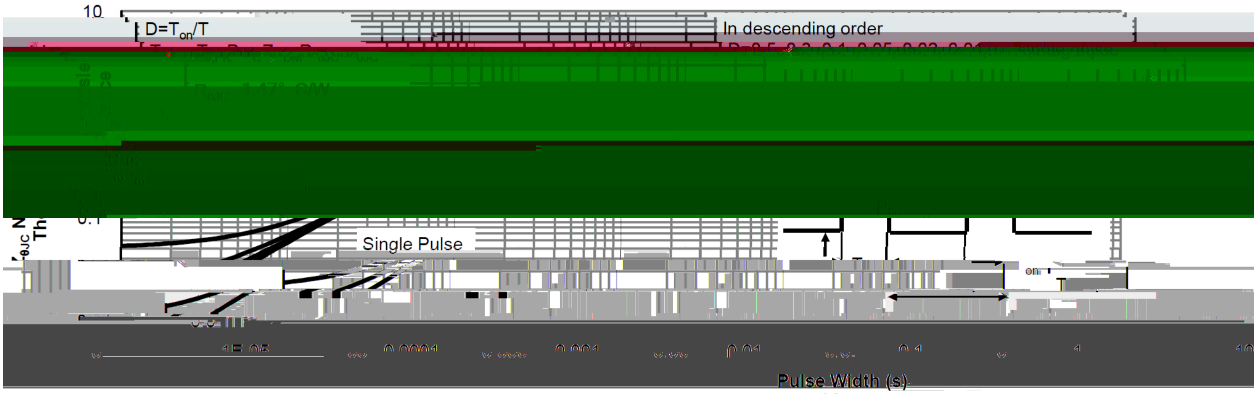
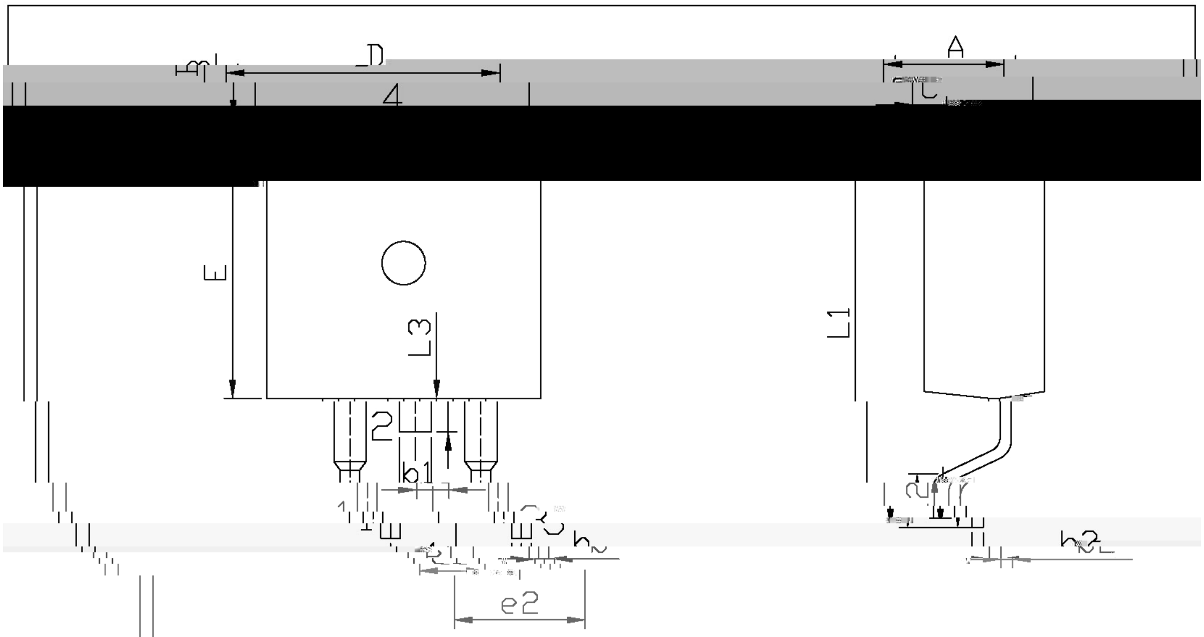


Figure 9: Maximum Forward Biased Safe Operating Area



lance Figure 10: Normalized Maximum Transient Thermal Imped

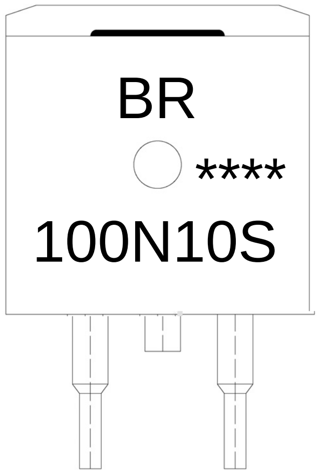
Ø ¤ =) ¢ / Package Dimensions



单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	e2	4.88	5.28
b1	1.15	1.35	L1	15.00	16.00

, M y ƒ / Marking Instructions



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(8 y ¸ [W A

4 9 y º Z W A

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Note:

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

šWD t…•Ž¢ (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

ª ¢ y	Note:
1o• Ä ½ " † 150 ½180 - k ž • 60 ½90sec;	1.Preheating:150~180 - , Time:60~90sec.
2o• Q › " † 245 r5 - k ž • 4 Ò 5 r0.5sec;	2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
3o•D N ò i Ò 0 , † 2 ½10 - /sec.	3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

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