

BRCS20N06DPQ

Rev.A Dec.-2023

/ Descriptions

TO-252 N MOS
N-CHANNEL MOSFET in a TO-252 Plastic Package.

/ Features

$V_{DS}=60V$; $I_D=20A$

$R_{DS(on)}@10V$ 37m (Type.25m)

$R_{DS(on)}@4.5V$ 42m (Type.30m)

AEC-Q101

Qualified to AEC-Q101 Standards for High Reliability,

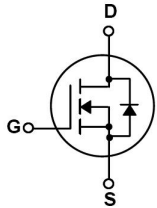
HF Product.

/ Applications

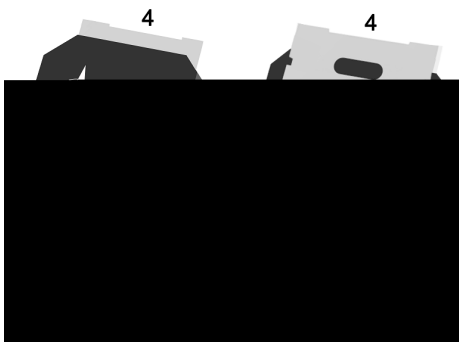
LED

Boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S PIN 4 D

/ Marking

See Marking Instructions.

Parameter	Symbol	Rating
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Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $R_L=2.5$ $V_{DS}=30V$ $R_{GEN}=3.0$		4.2		ns

/ Electrical Characteristic Curve

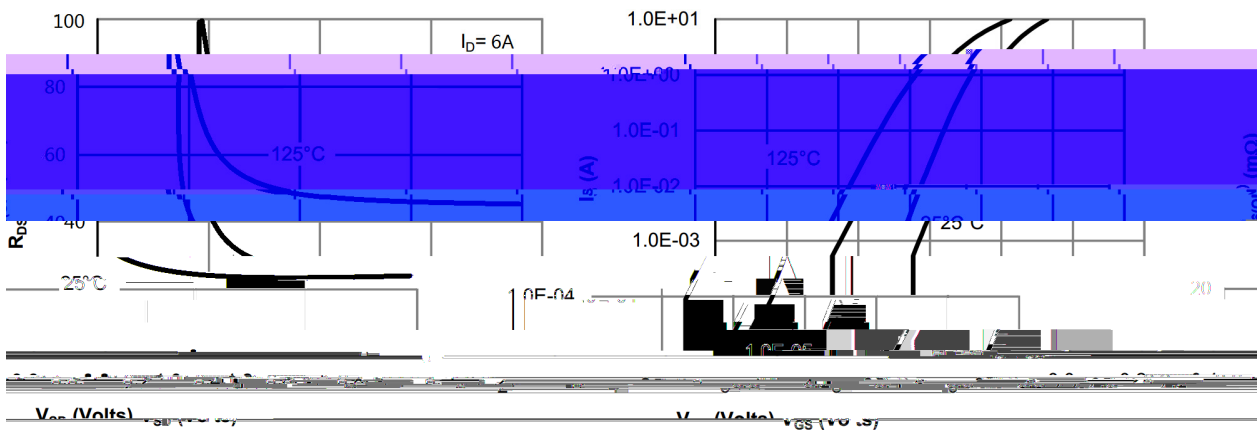
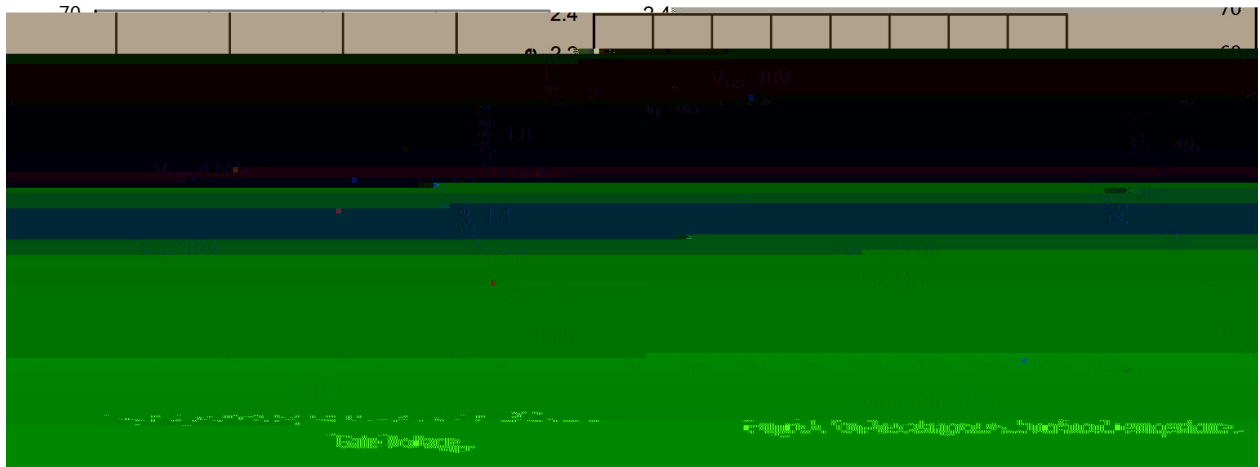
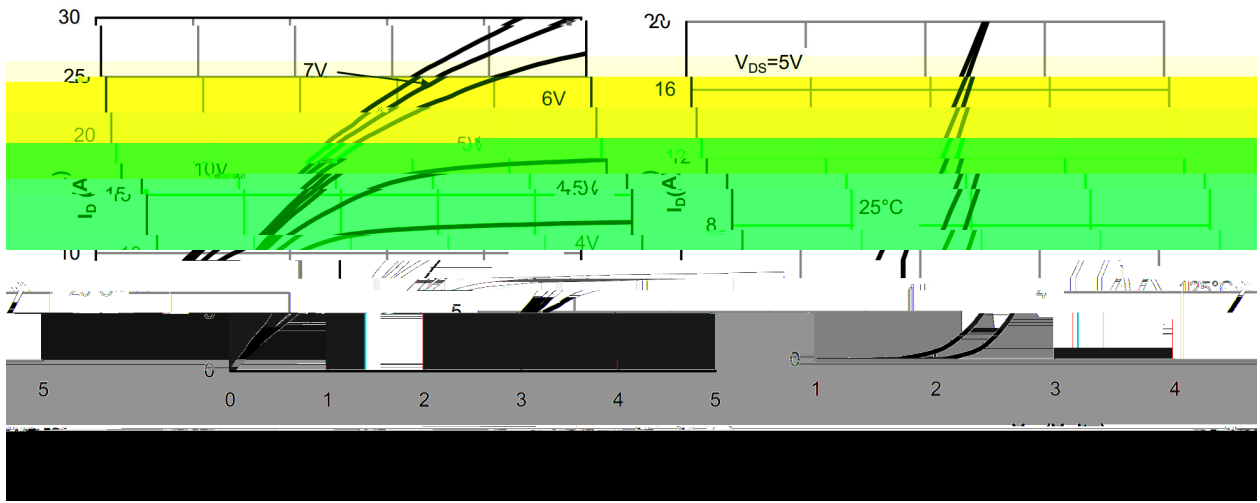
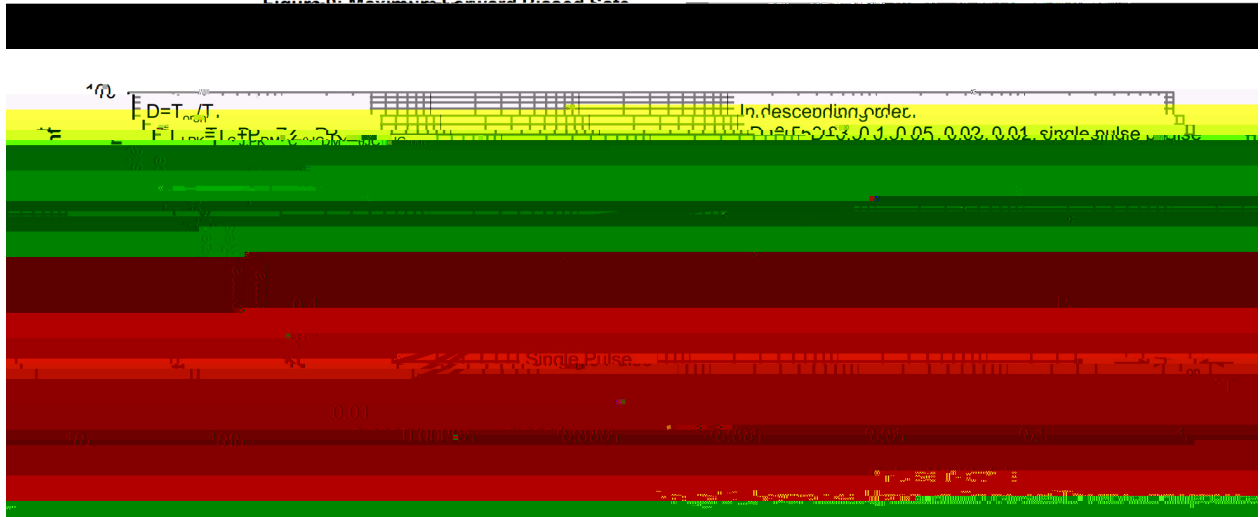
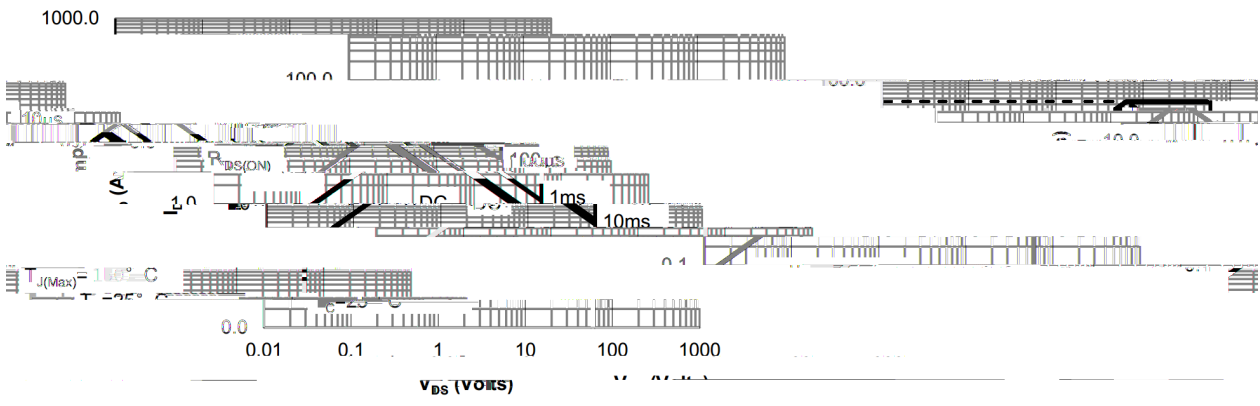
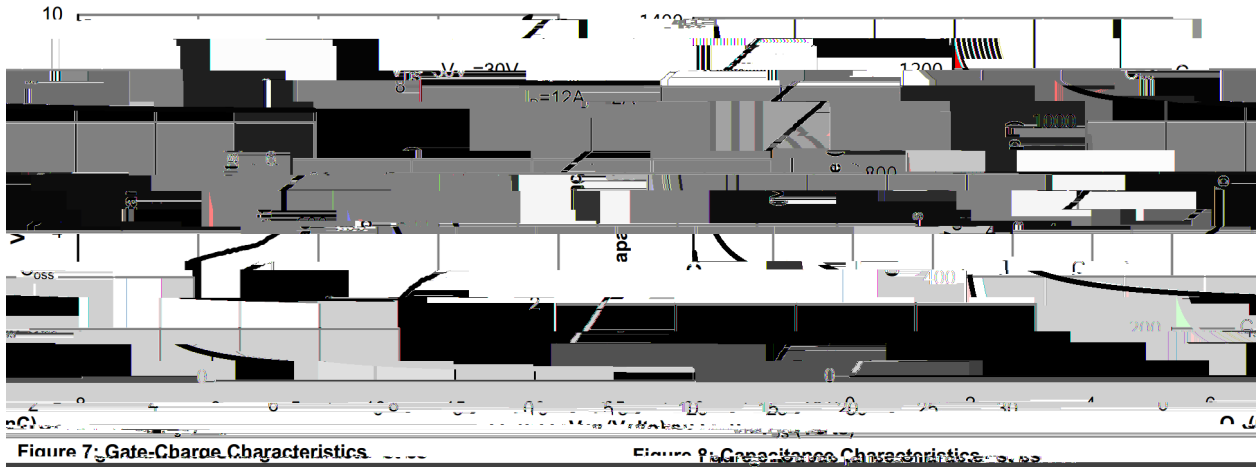


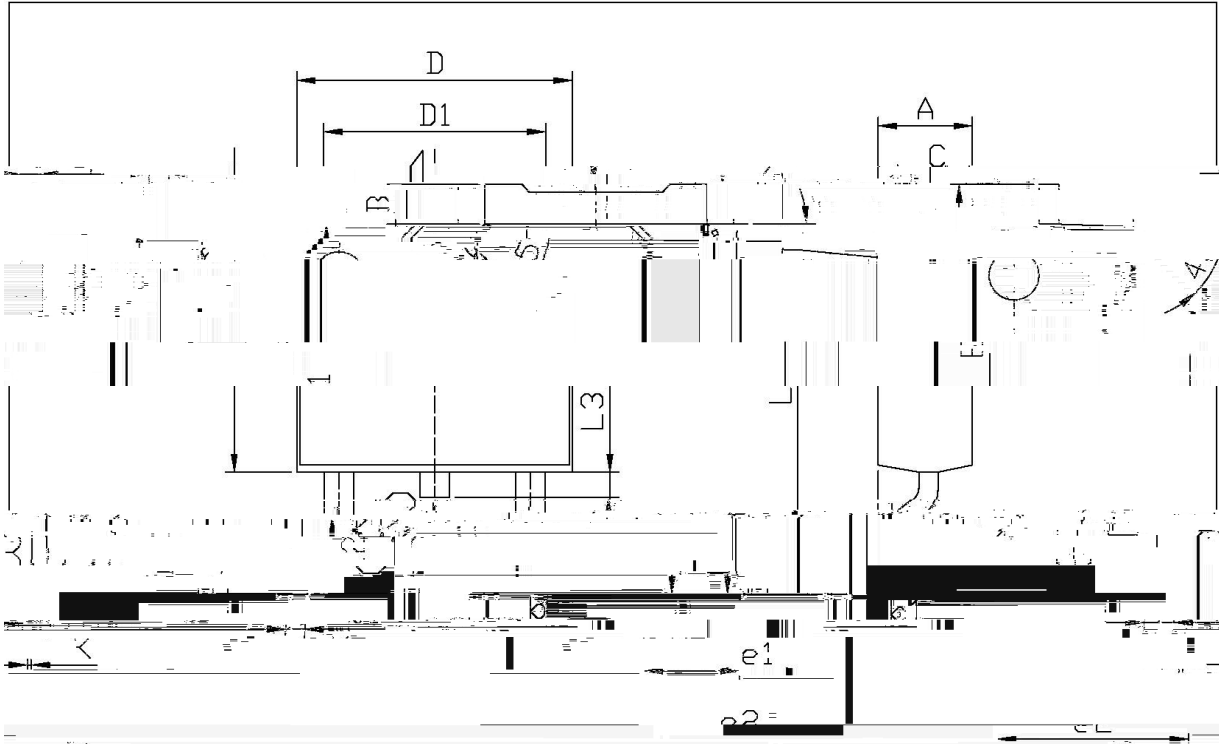
Figure 6: Body-Diode Characteristics

Figure 5: On-Resistance vs. Gate-Source Voltage

/ Electrical Characteristic Curve



/ Package Dimensions

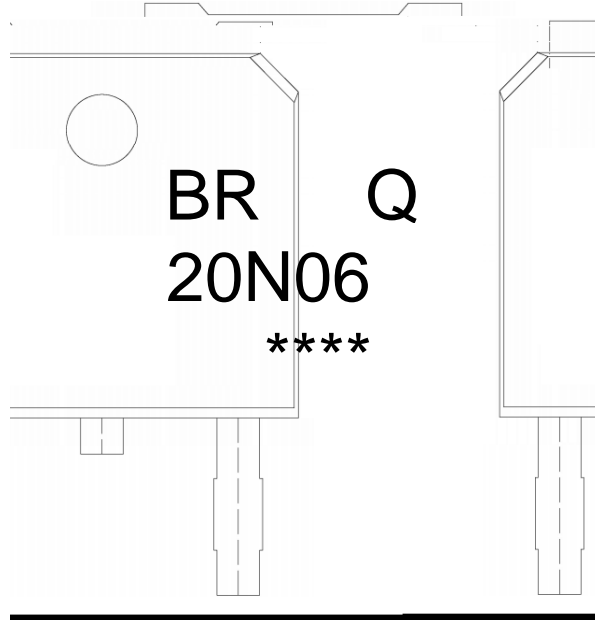


单位: mm

Dimensions, Millimeters		Symbol		Dimensions, In Millimeters		Symbol	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
0.08	0.10			0.00	0.00		
0.95	1.25	e1		2.24	2.24		
0.70	0.90			1.63	1.63		
0.45	0.55			0.85	1.00		
0.45	0.55			1.50	1.50		
0.45	0.75			0.60	0.60		
0.10		D1		5.10	5.50	K	0.00

T0-252

/ Marking Instructions



BR

Q

20N06

Note:

BR: Company Code

Q: Automobile halogen-free product Code

20N06: Product Type Code

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

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