

/ 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

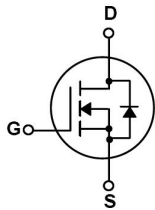
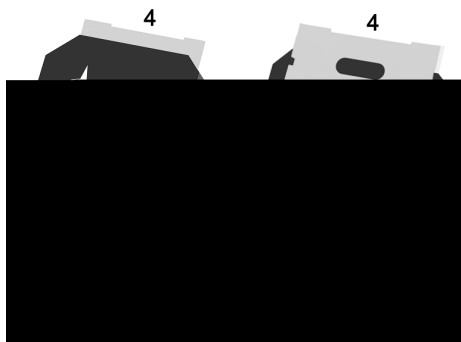
Qualified to AEC-Q101 Standards for High Reliability,

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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BRCS20N06DPQ

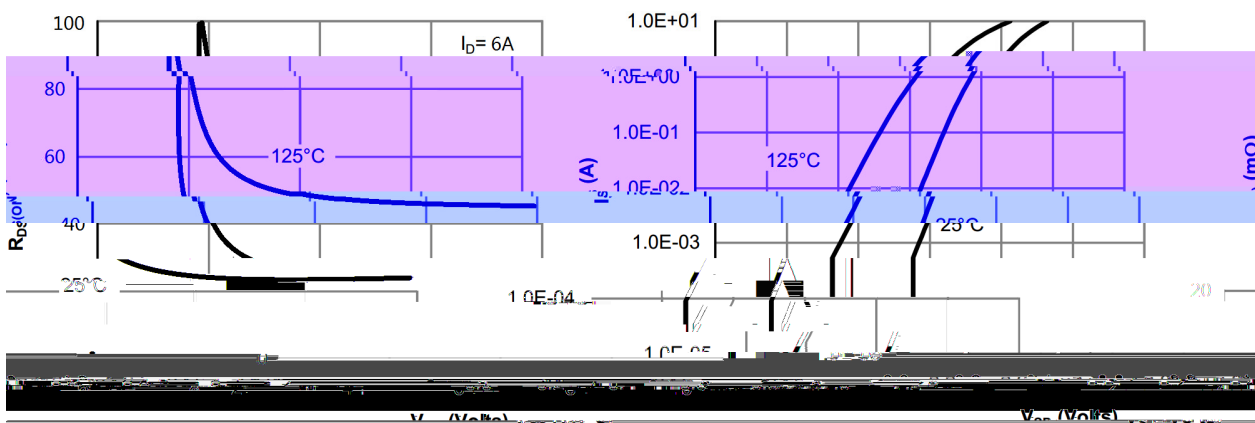
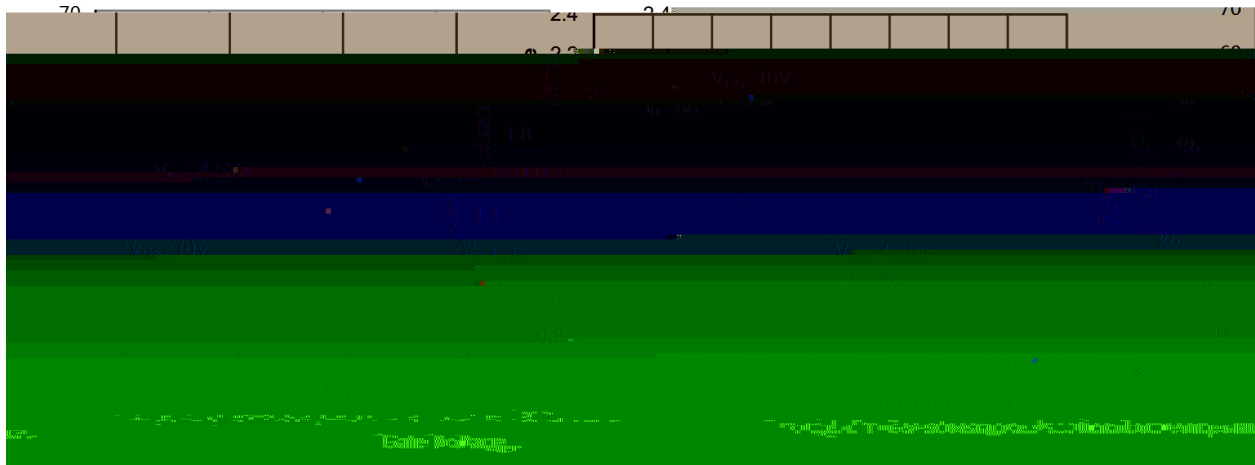
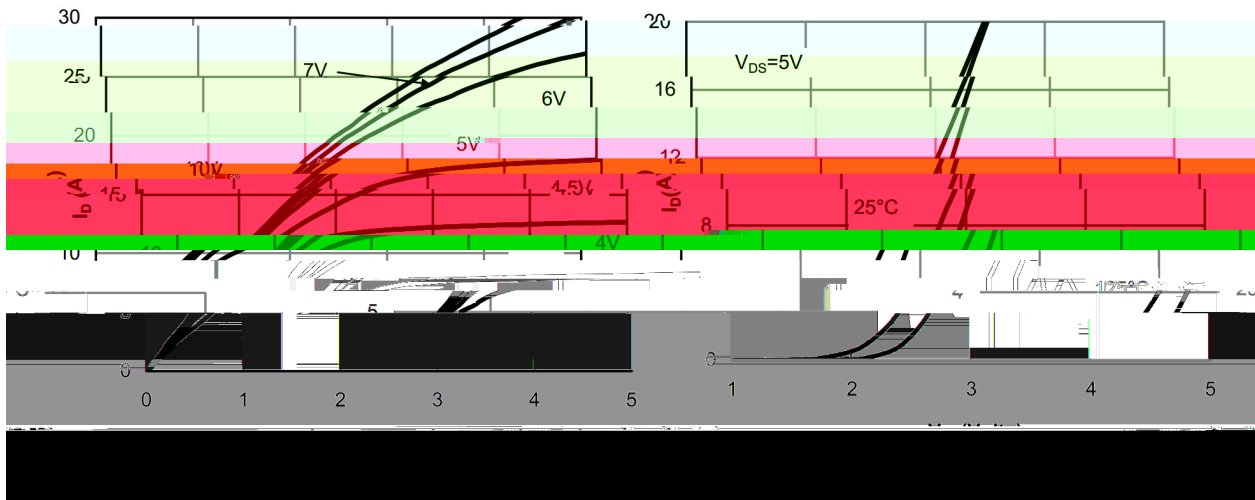
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DATA SHEET

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



Characteristics

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

Figure 6: Body-Diode Characteristics

/ Electrical Characteristic Curve

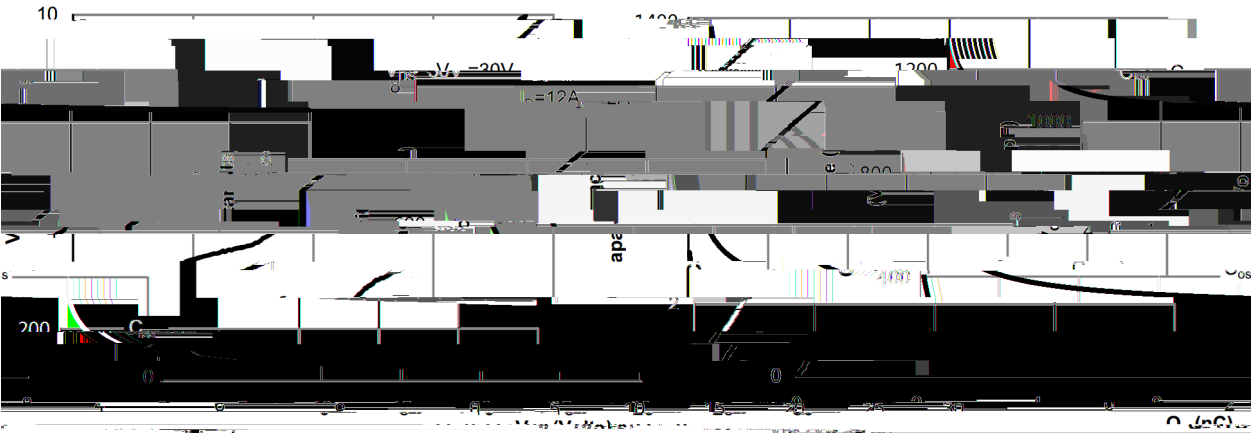


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

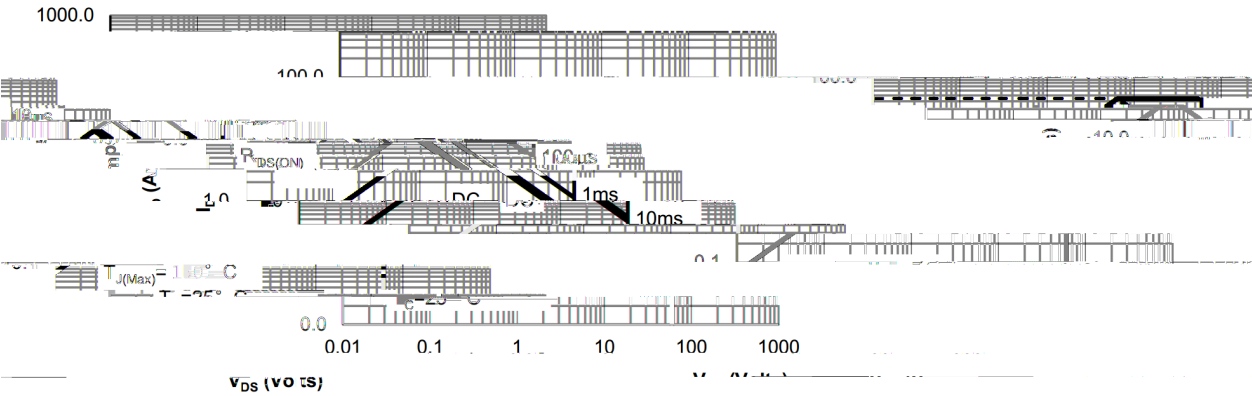
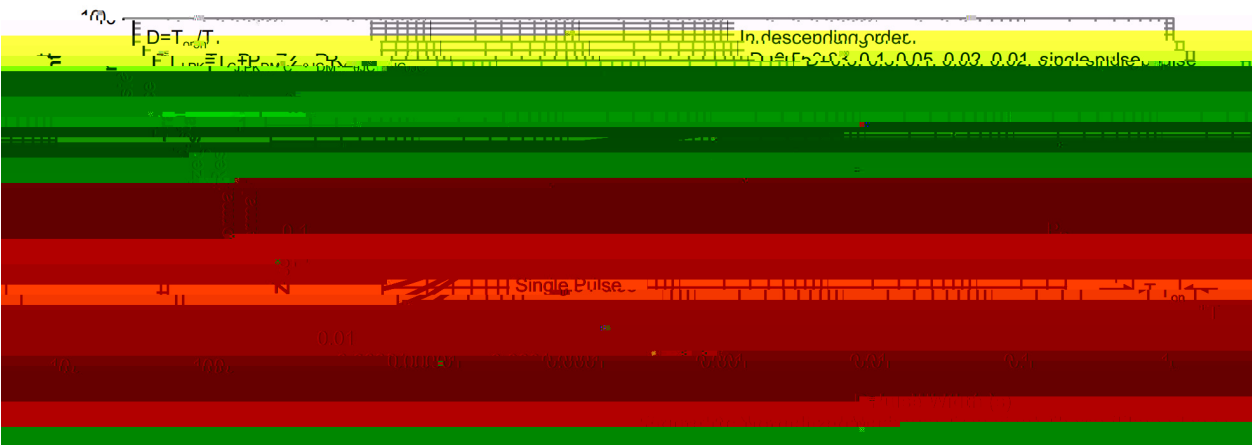
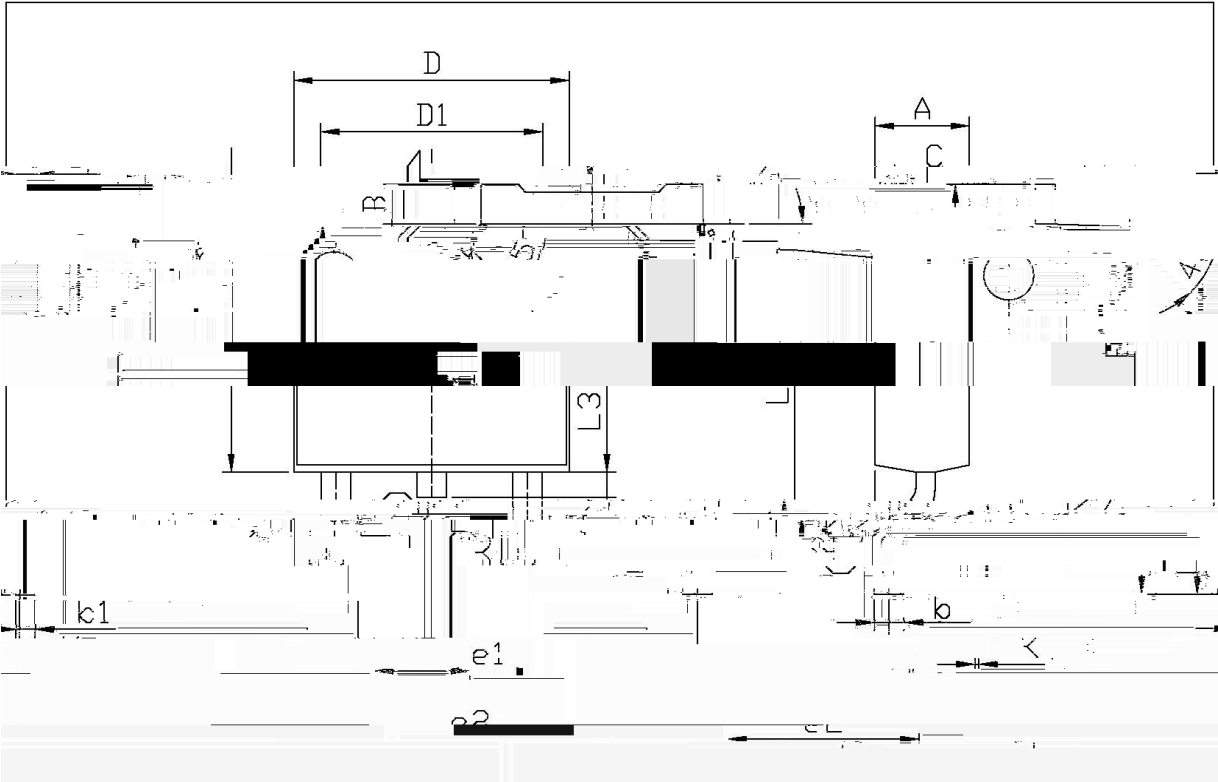


Figure 9: Maximum Forward Biased Safe Area



/ Package Dimensions

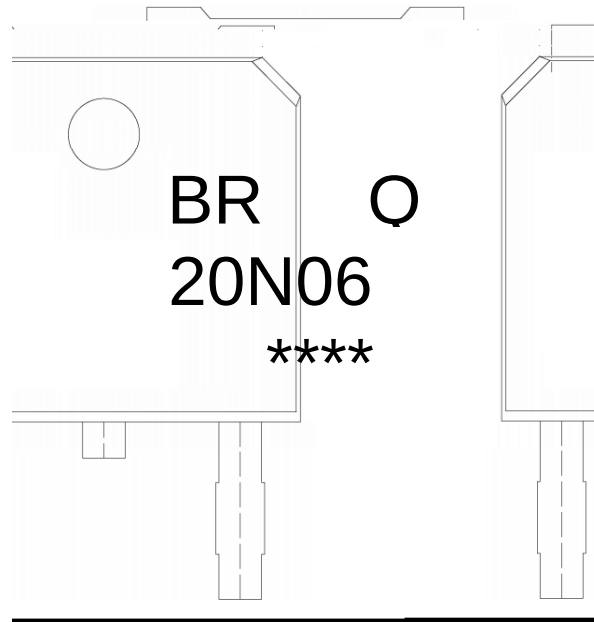


单位：mm

Dimensions, Millimeters		Dimensions, Inches	
Symbol	Value	Symbol	Value
e1	2.24	B	0.95
L1	4.43	k	0.70
L2	10.35	k1	0.45
L3	10.40	e2	0.55
L4	10.40	CL	1.50
L5	6.45	k	0.60
L6	6.76	k	0.60
L7	13.00	k	0.60
L8	0.10	k	0.60
L9	0.10	k	0.60
L10	5.10	k	0.60
L11	5.50	k	0.60

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

BRCS20N06DPQ

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蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET