产品概述

N TO-220

N-CHANNEL MOSFET in a TO-220 Plastic Package.

产品特性

$R_{DS(on)}$ C_{rss} AEC-Q101

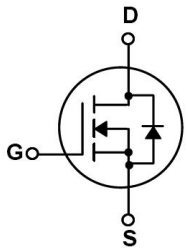
Low $R_{DS(on)}$,low gate charge, low C_{rss}, fast switching, Trench Technologies, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

应用范围

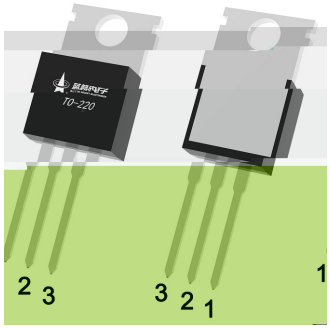
DC/DC

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products, Meet the stringent requirements of automotive applications.

内部电路图



封装形式



PIN1 G PIN 2 D PIN 3 S

订购信息

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain Current	I_D(Tc=25)	50	A
Drain Current - Pulsed	I_{DM}	200	A
Gate-Source Voltage	V_{GS}	±20	V
Avalanche Current	I_{AS}		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=30V R_L=1.5Ω R_{GEN}=3q		8		ns
Turn-On Rise Time	t_r			5		
Turn-Off Delay Time	$t_{d(off)}$			30		
Turn-Off Fall Time	t_f			5.5		

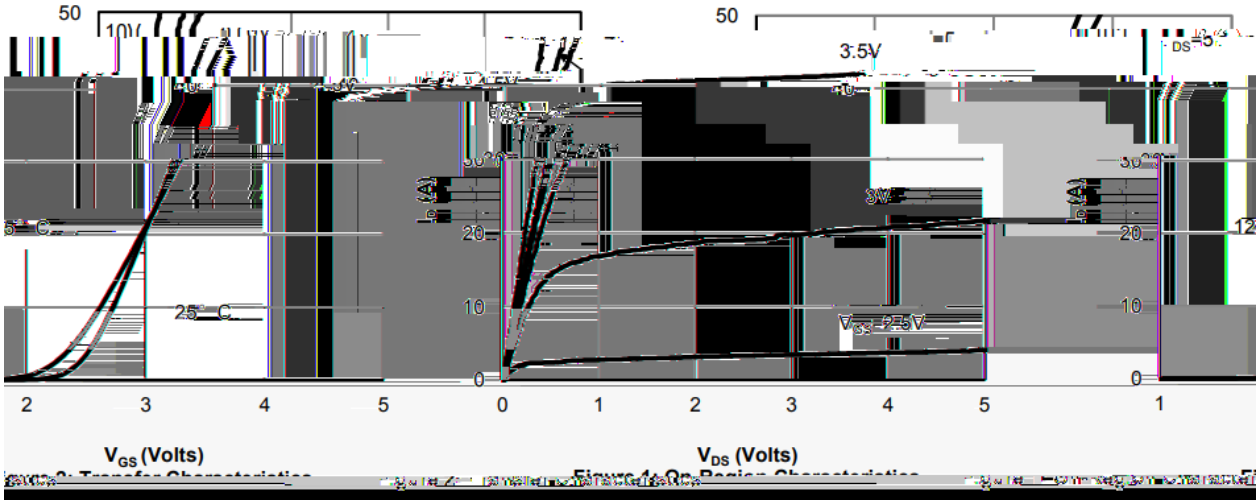


Figure 2: Transfer Characteristics
Figure 1: On-Region Characteristics

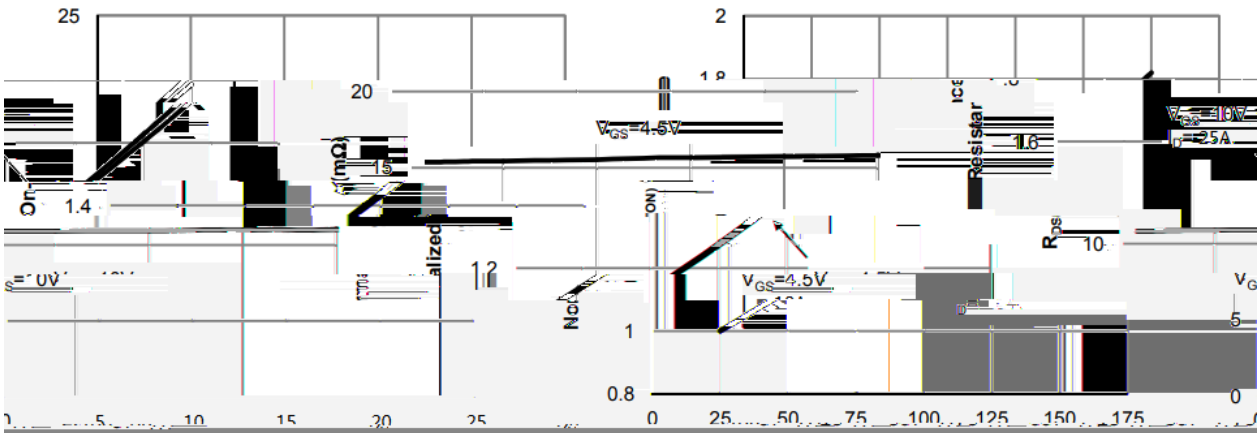


Figure 3: On-Resistance vs. Drain Current and Gate Voltage
Figure 4: On-Resistance vs. Junction Temperature

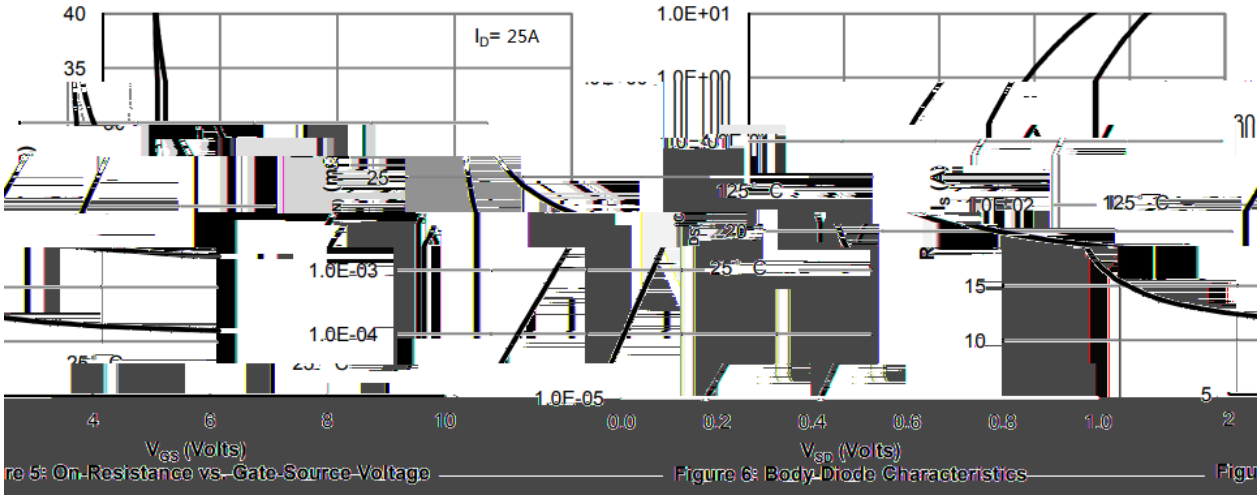


Figure 5: On-Resistance vs. Gate-Source Voltage
Figure 6: Body Diode Characteristics



ure 8: Capacitance Characteristics

Figure 7: Gate-Charge Characteristics

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Figure 9: Maximum Forward Biased Safe Operating Area

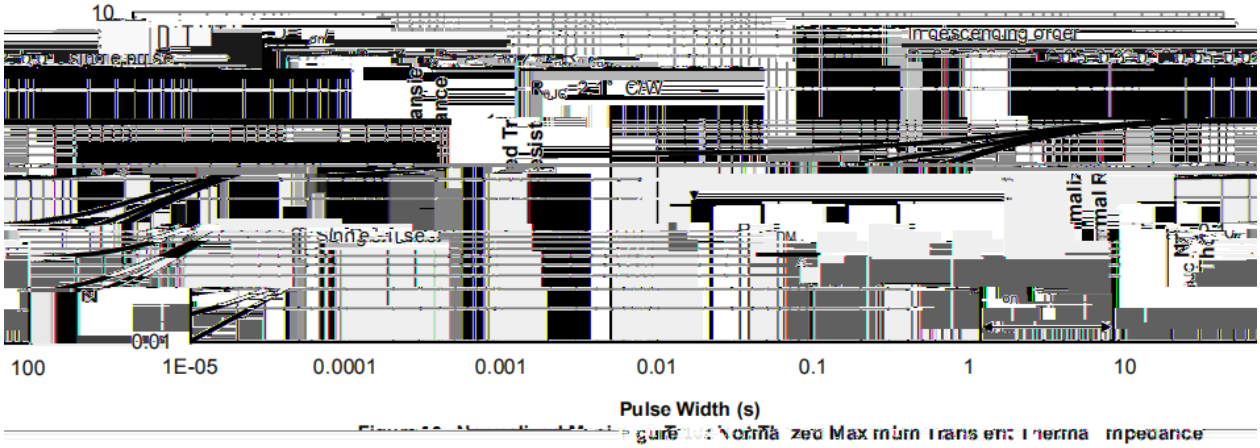

Figure 10: Normalized Maximum Transient Thermal Impedance

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A
C
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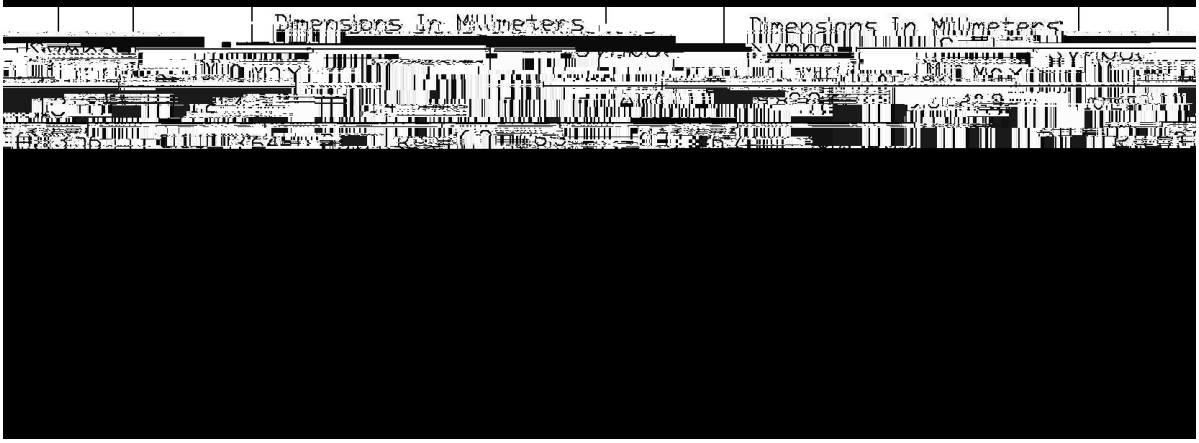
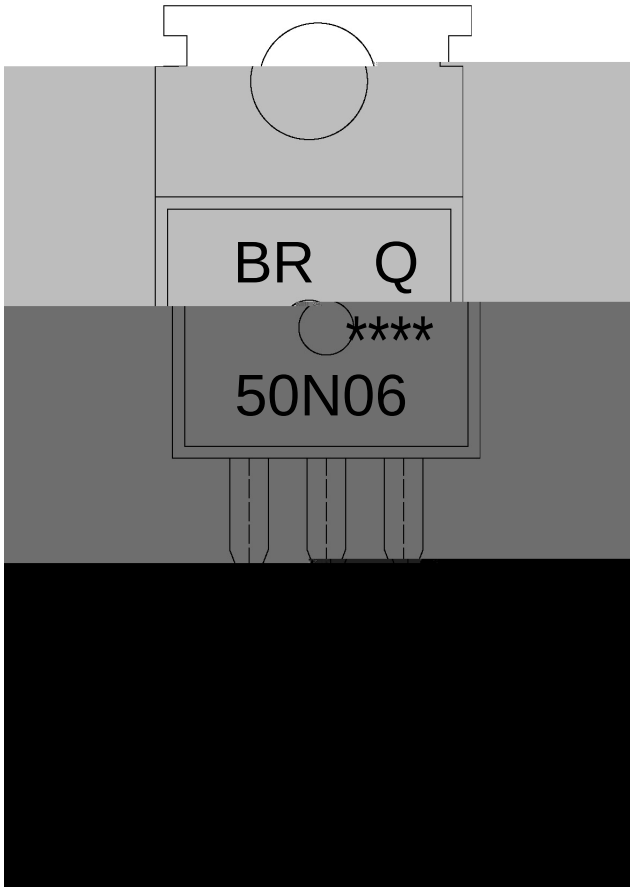
B


Dimensions In Millimeters
Dimensions In Millimeters



BR

Q

50N06

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Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
50N06:	Product Type
****:	Lot No. Code, code change with Lot No

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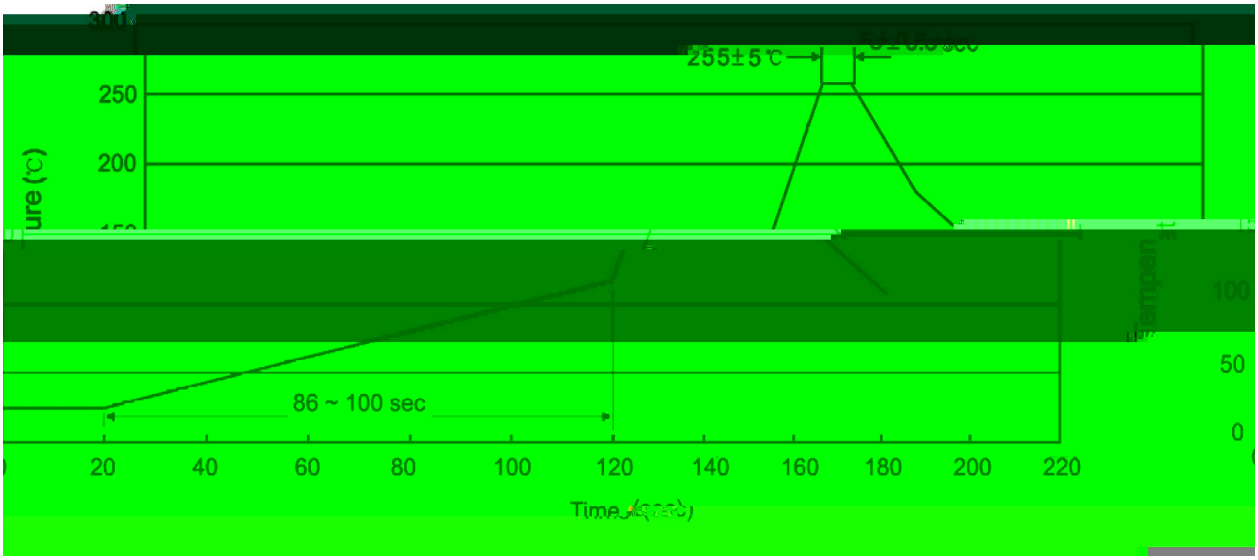

Note:

1 25 150 60 90sec;

2 255±5 5±0.5sec;

3 2 10 /sec.

1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:255±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

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270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

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/ BULK

Package Type	Units					Dimension (unit mm³)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension (unit mm³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

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