

/ Descriptions

PDFN5 6A N

Dual N-CHANNEL MOSFET in a PDFN5×6A Plastic Package.

/ Features

Dual N-Ch

$V_{DS}(V)=40V$

$I_D=60.2A$

$R_{DS(ON)}<6.5m$ ($V_{GS}=10V$)

$R_{DS(ON)}<12.5m$ ($V_{GS}=4.5V$)

AEC-Q101

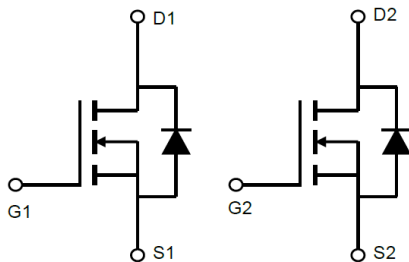
Qualified to AEC-Q101 Standards for High Reliability; HF Product.

/ Applications

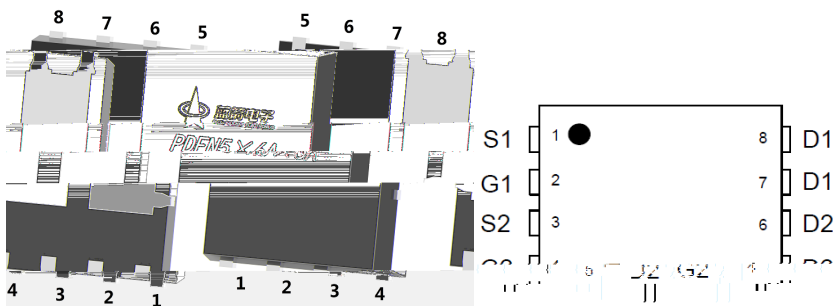
PWM LED

PWM Application, Load Switch, Power Management, Dimming LED, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



/ Marking

。 See Marking Instructions.

BRCS060N04YMQ

Rev.B Mar.-2023

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Drain Current	$I_D(T_C=25^{\circ}\text{C})$	60.2	A
Drain Current - Pulsed	I_{DM}	217	A
Gate-Source Voltage	V_{GS}	± 20	V
Single Pulsed Avalanche Energy	E_{AS}	240.1	mJ
Avalanche Current	I_{AS}	24.5	A
Power Dissipation	$P_D(T_C=25^{\circ}\text{C})$	36	W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	t					

/ Electrical Characteristic Curve

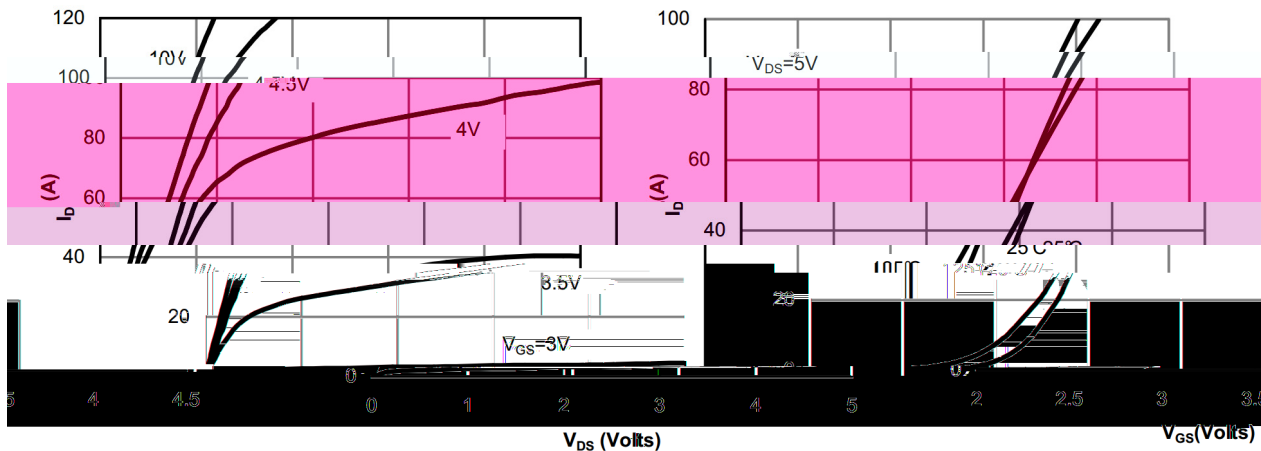


Figure 1: Drain Characteristics Figure 2: Transfer Characteristics

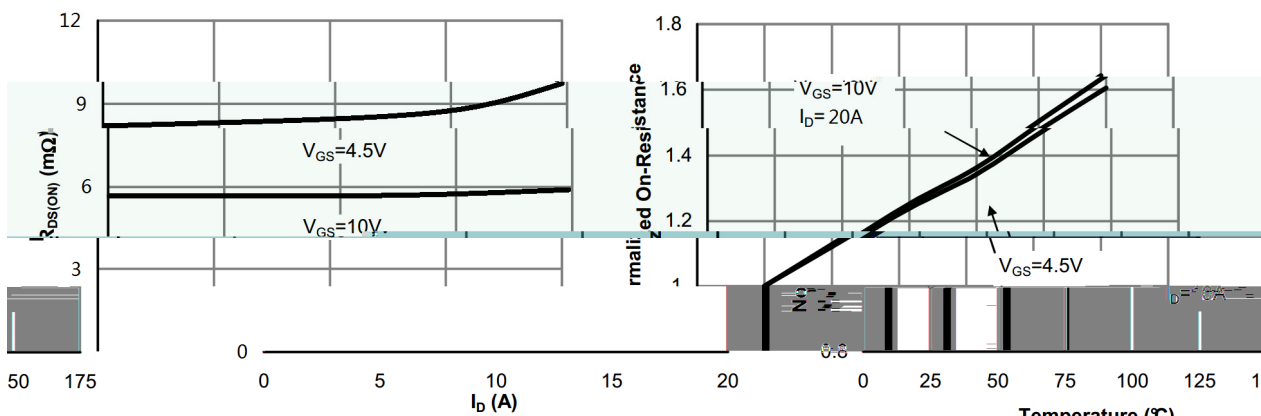


Figure 3: On-Resistance vs. Drain Current and Gate Voltage Figure 4: On-Resistance vs. Junction Temperature

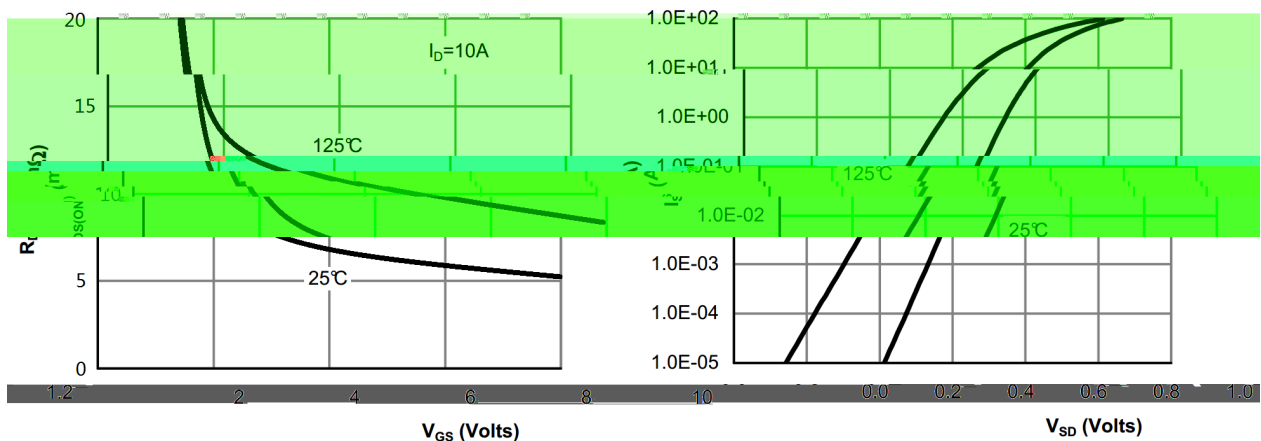
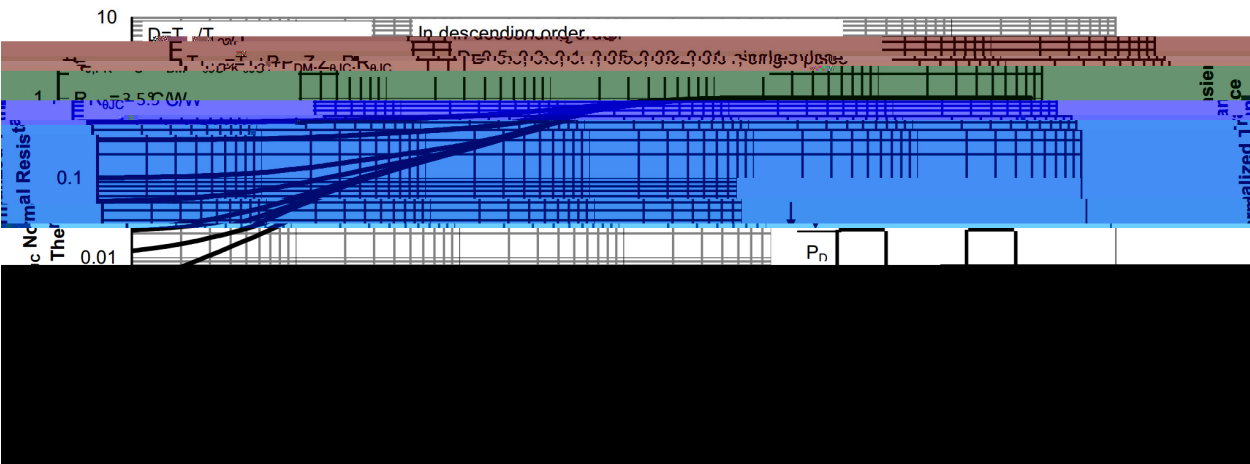
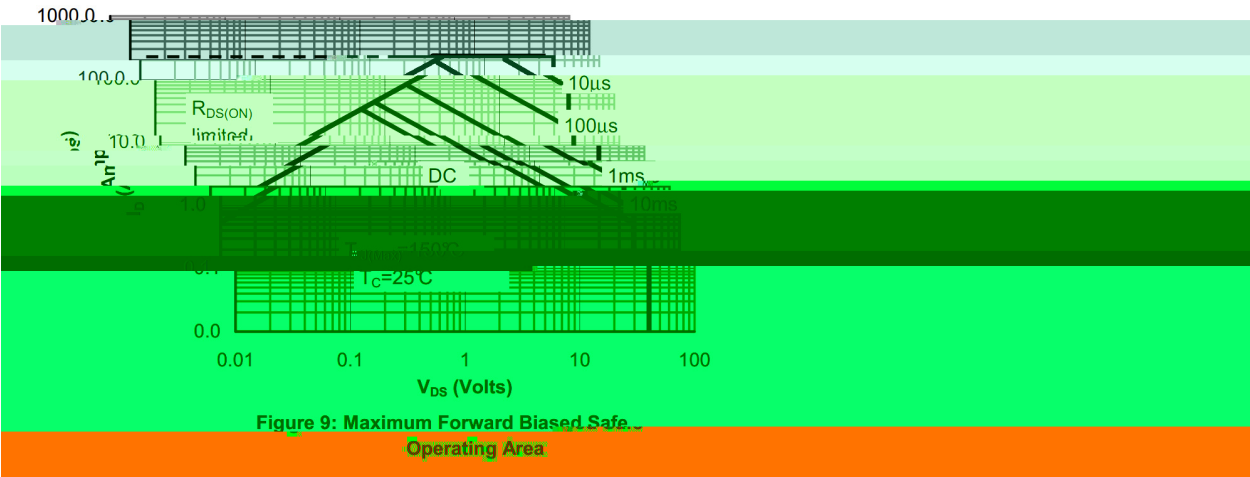
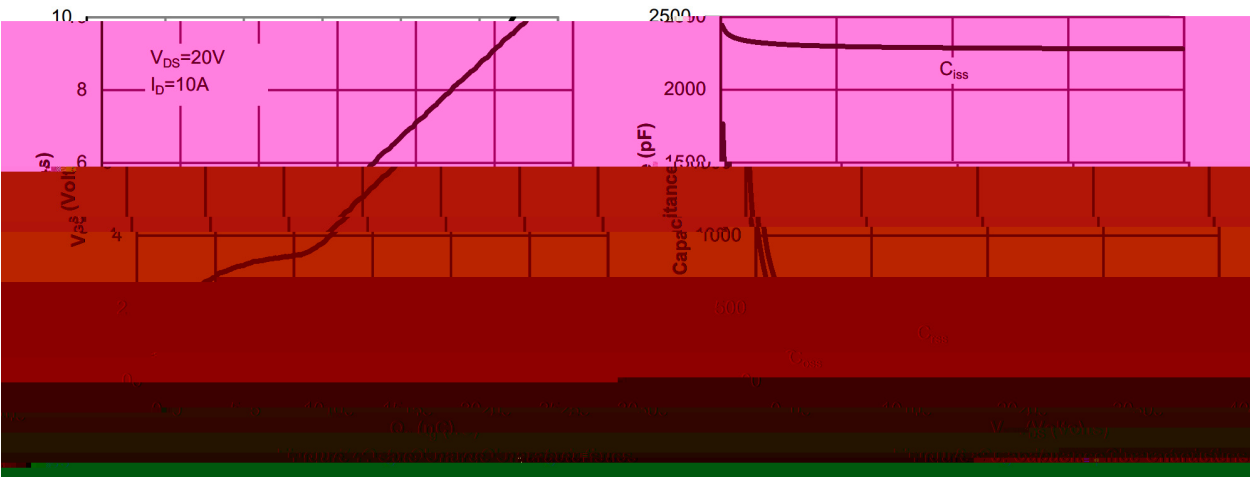


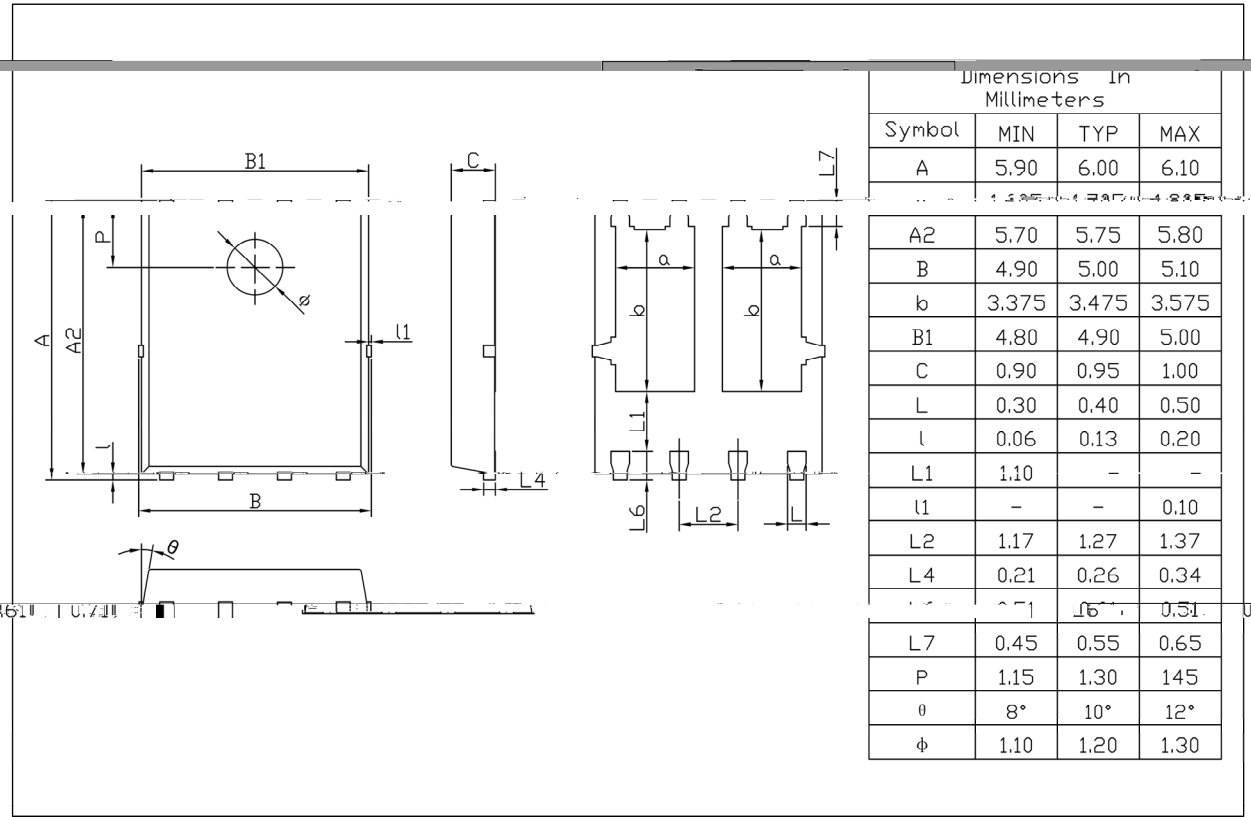
Figure 5: On-Resistance vs. Gate-Source Voltage Figure 6: Body-Diode Characteristic

/ Electrical Characteristic Curve



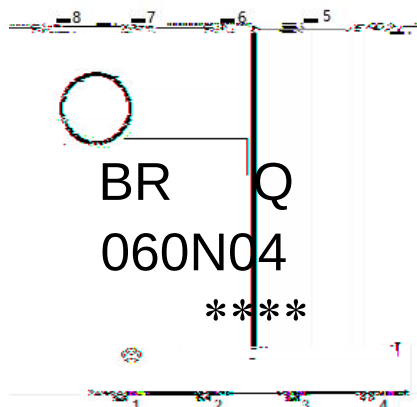
I Package Dimensions

PDFN5 X6A Unit:mm



Rev.01 202209

/ Marking Instructions



060N04

Note

BR	Company Code
Q:	Automobile halogen-free product Code
060N04	Product Type
****:	Lot No. Code, code change with Lot No

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 200 | 60 | 120sec; | 1.Preheating:150~200 , Time:60~120sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260 5 Time:10 1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm ³)
	5000	2	10000	6	60000	13"×12	360	
PDFN5×6A								