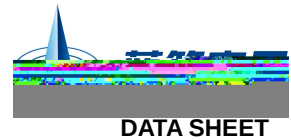


/ Revised record

A	2021.04.18	All	AOS-AONS32306		
B	2021.05.26	2	PK632BA ID PD Rth		
C	2021.09.01	1,5	+ ID-TJ		

BRCS030N03ZC

Rev.C Sep.-2022



PDFN5×6 N
N-Channel MOSFET in a PDFN5×6 Plastic Package .

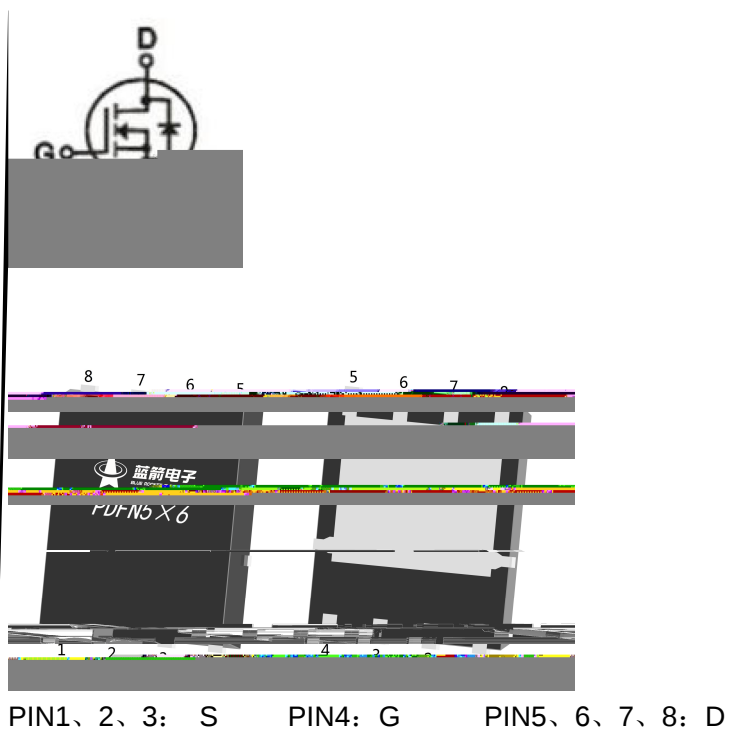
Low $R_{DS(ON)}$ to minimize conductive loss;low Gate Charge for fast switching;Low Thermal resistance;HF Product.

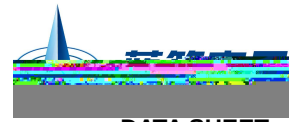
MB/NB/UMPC/VGA

Buck

-

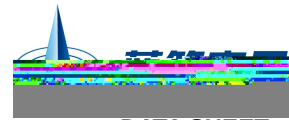
Battery Management,High Frequency Point-of-Load Synchronous Buck Converter for MB/NB/UMPC/VGA,Networking DC-DC Power System,Load Switch.





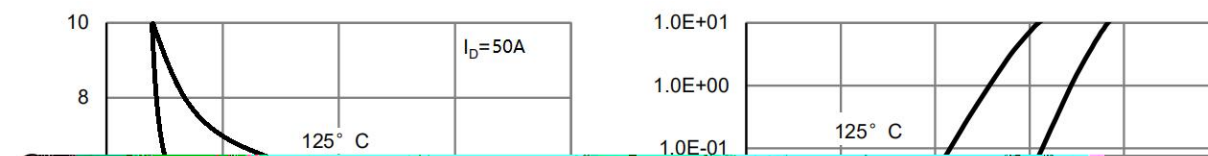
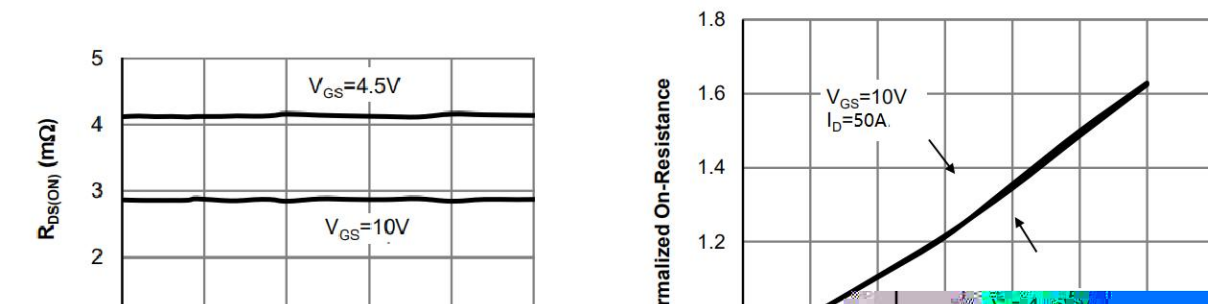
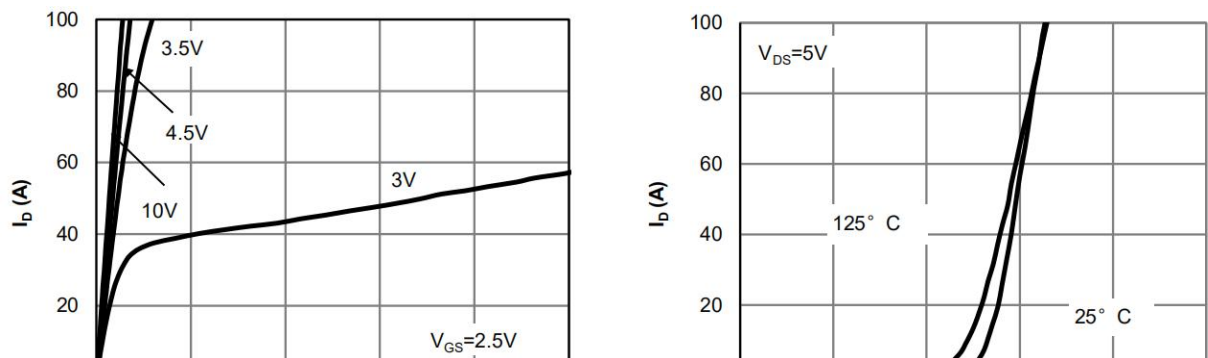
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	30	V
Continuous Drain Current		I_D	56	A
Pulsed Drain Current		I_{DM}	168	A
Gate-Source Voltage		V_{GS}	± 20	V
Power Dissipation		$P_D(T_c=25^\circ\text{C})$	33	W
Avalanche energy(L=0.5mH)		E_{AS}	72	mJ
Avalanche Current(L=0.5mH)		I_{AS}	36	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	$^\circ\text{C}$
Maximum Junction-to-Ambient	$t \leq 10\text{s}$	$R_{\theta JA}$	30	$^\circ\text{C/W}$
	Steady-State		54	
Maximum Junction-to-Case	Steady-State	$R_{\theta JC}$	3.8	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D=250\mu\text{A}, V_{GS}=0\text{V}$	30	31		V

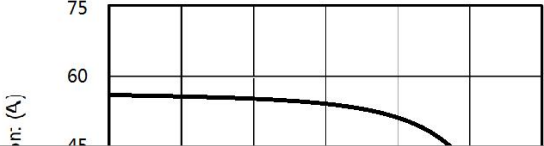
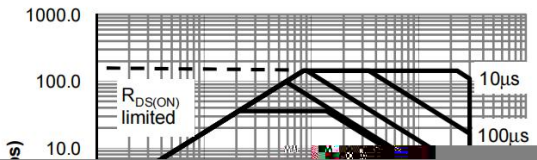
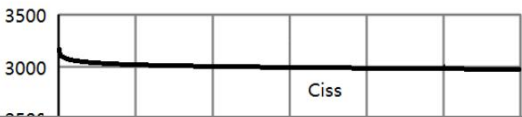
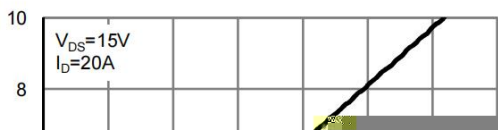


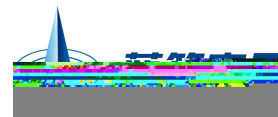
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$			9		
Turn-On Rise Time	t_r	$V_{GS}=10V$ $R_L=0.75\ \Omega$		$V_{DS}=15V$ $R_{GEN}=3\ \Omega$		ns

/ Electrical Characteristic Curve

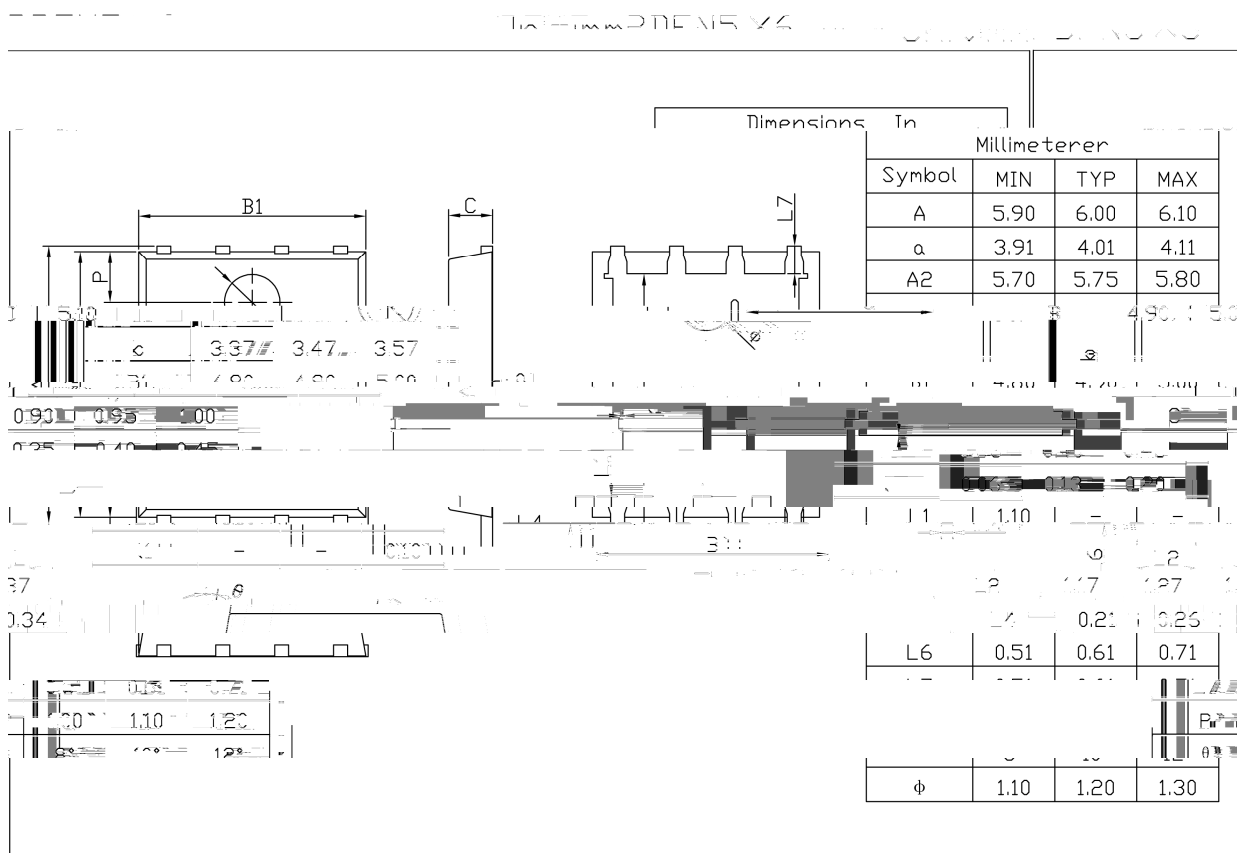


/ Electrical Characteristic Curve



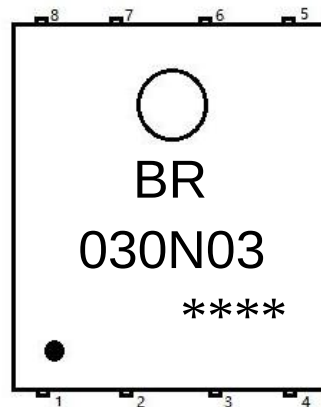


/ Package Dimensions



Rev.00 201812

/ Marking Instructions



BR

030N03

Note

BR

Company Code

030N03

Product Type

****;

Lot No. Code, code change with Lot No

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

- Note:
1.Preheating:150~180℃, Time:60~90sec.
- 1 150 180 60 90sec;
- 2 245±