/ Revised record

A	2020.09.16		AOS-AO4453 BRCS120N02ZJ ID,PD,		
B	2021-12-1	8	3000 4000		

/ Descriptions

DFN 2*2B-6L P ! " MOS # $ % & '
P-Channel Enhancement Mode Field Effect Transistor in a DFN 2*2B-6L Plastic Package.

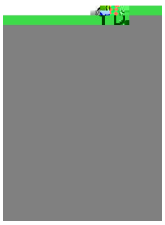
/ Features

V_{DS} (V) = -12V
I_D = -8 A (V_{GS} = ±10V)
( ) * + 。HF Product.

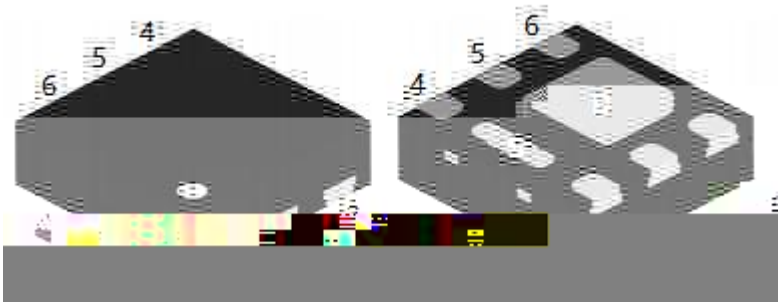
/ Applications

, - . / & 0 1 2 3 4 5 6 7 . 8 9 . : ; '
Power Management in Notebook computer, Portable Equipment and Battery powered systems.

/ Equivalent Circuit



/ Pinning



出脚	定义
Pin1	D
Pin2	D
Pin3	G
Pin4	S
Pin5	D
Pin6	D

/ Marking

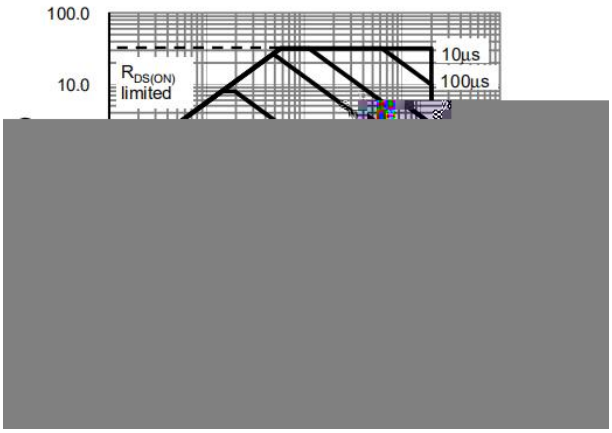
< = > ? @ See Marking Instructions.

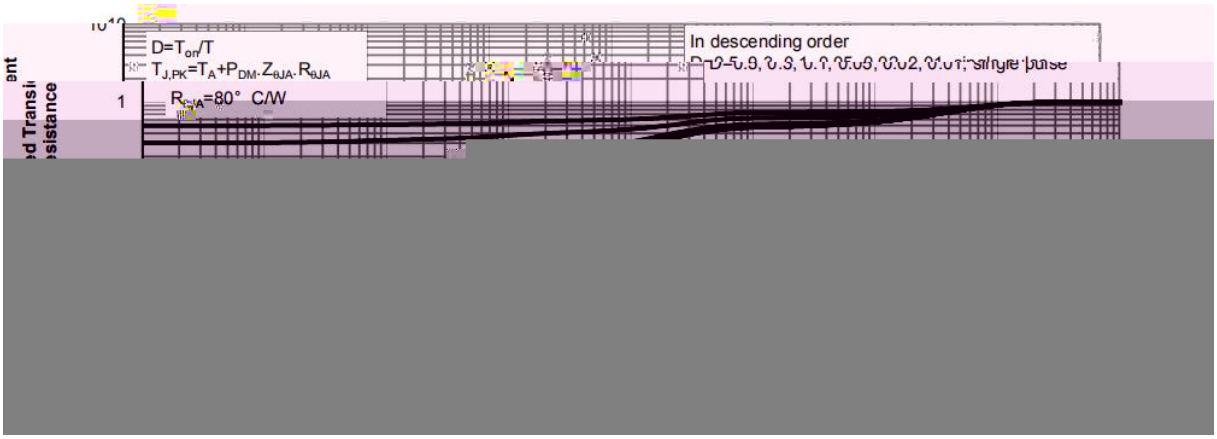
Parameter	Symbol	Rating	Unit
d Drain-Source Voltage	V_{DSS}	-12	V
Gate-Source Voltage	V_{GSS}	±10	V
Continuous Drain Current	I_D (T_a=25°C)	-8	A
Continuous Drain Current	I_D (T_a=70°C)	-6	A
Pulsed Drain Current	I_{DM}	-32	A
Avalanche Current	I_{AS}		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA V_{GS}=0V	-12	-17		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-12V V_{GS}=0V			-1.0	μA
		V_{DS}=-9.6V V_{GS}=0V T_J=55°C			-5.0	
Gate-Body leakage current	I_{GSS}	V_{DS}=0V V_{GS}=±10V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS I_D=-250μA	-0.4	-0.7	-1.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V I_D=-10A		10	12	mΩ
		V_{GS}=-4.5V I_D=-8A		11.5	14	
		V_{GS}=-2.5V I_D=-5A		15.8	18	
Diode Forward Voltage	V_{SD}	I_S=-1A V_{GS}=0V		-0.74	-1.0	V
Gate Resistance	R_g	V_{GS}=0V V_{DS}=0V f=1MHz		6.7		Ω
Input Capacitance	C_{iss}	V_{DS}=-15V V_{GS}=0V f=1.0MHz		2110		pF
Output Capacitance	C_{oss}			550		
Reverse Transfer Capacitance	C_{rss}			385		
Total Gate Charge	Q_g	V_{GS}=-4.5V V_{DS}=-6V I_D=-10A		12.7		nC
Gate-Source Charge	Q_{gs}			1.7		
Gate-Drain Charge	Q_{gd}			3.4		
Turn-on Delay Time	$t_{d(ON)}$	V_{GS}=-4.5V V_{DS}=-6V R_L=0.67Ω R_{GEN}=3Ω		11		ns
Turn-on Rise Time	t_r			25		
Turn-off Delay Time	$t_{d(OFF)}$			70		
Turn-off Fall Time	t_f			41.5		

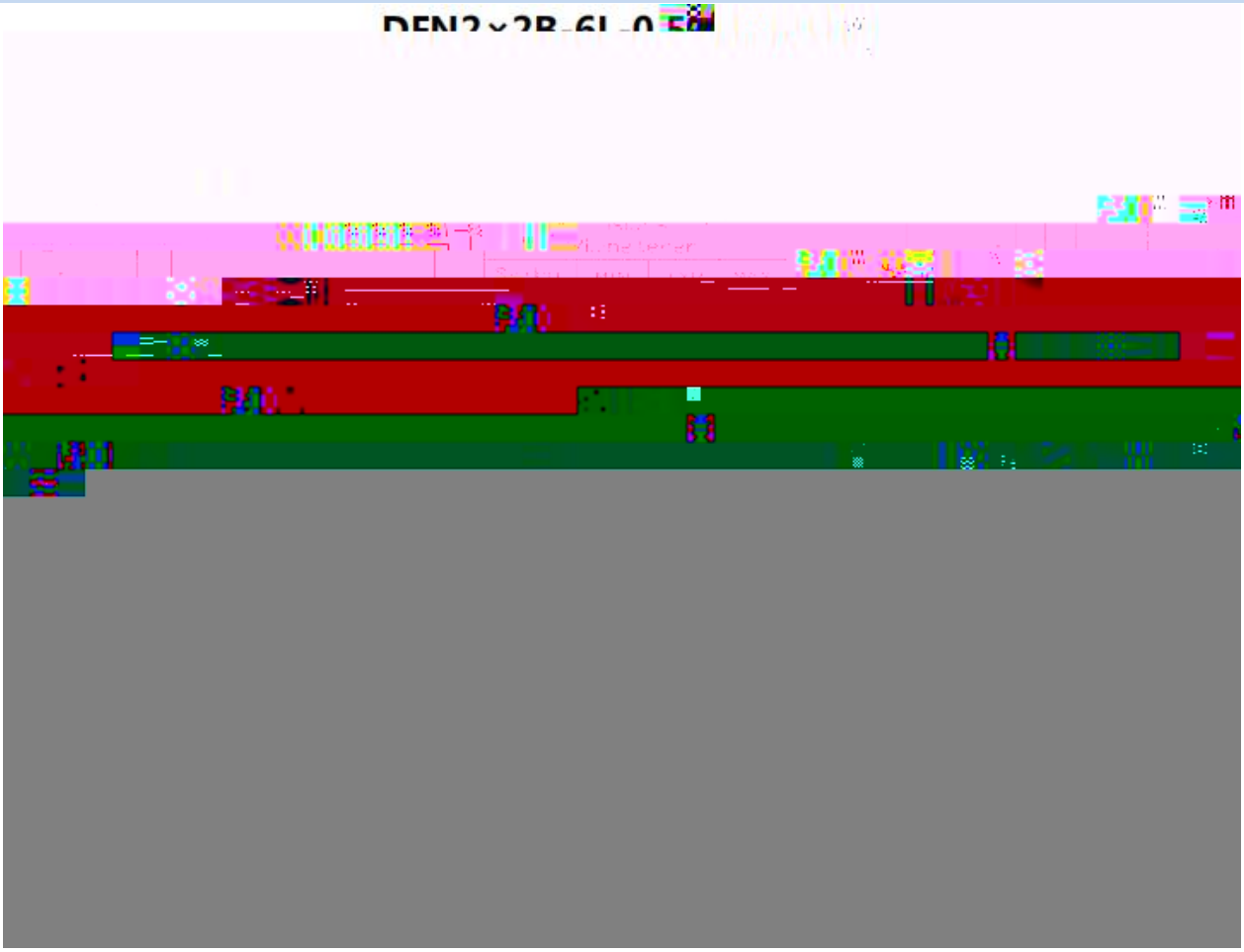
/ Electrical Characteristic Curve



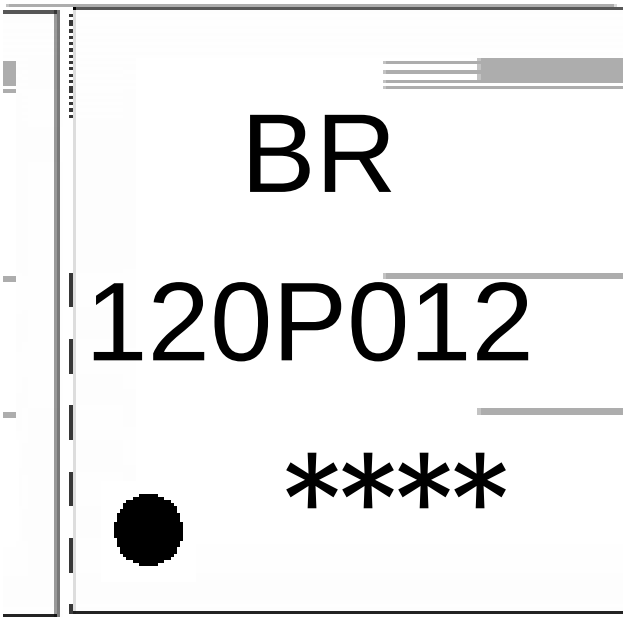




/ Package Dimensions



/ Marking Instructions



BR
120P012
****

Note:

BR:	Company Code.
120P012:	Product Type
****:	Lot No. Code, code change with Lot No.