

/ Revised record

A	2020.11.26	ALL	BRCS80N03DP		

/ Descriptions

DFN 3*3A-8L N MOS

N-Channel Enhancement Mode Field Effect Transistor in a DFN 3*3A-8L Plastic Package.

/ Features

 $V_{DS} (V) = 30V$ $I_D = 40 A (V_{GS} = \pm 20V)$ $R_{DS(ON)} @ 10V \leq 6mR (Typ. 4.7mR)$

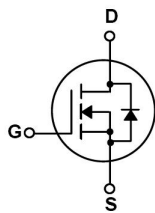
。 HF Product.

/ Applications

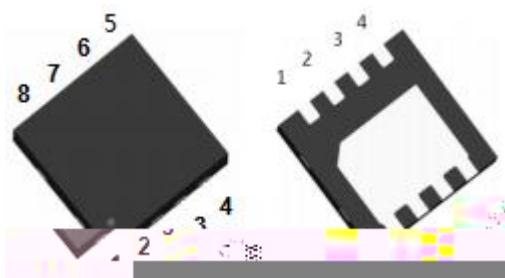
DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

/ Equivalent Circuit



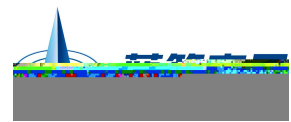
/ Pinning



出脚	定义
Pin1	S
Pin2	S
Pin3	S
Pin4	G
Pin5	D
Pin6	D
Pin7	D
Pin8	D

/ Marking

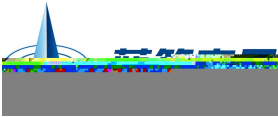
See Marking Instructions.



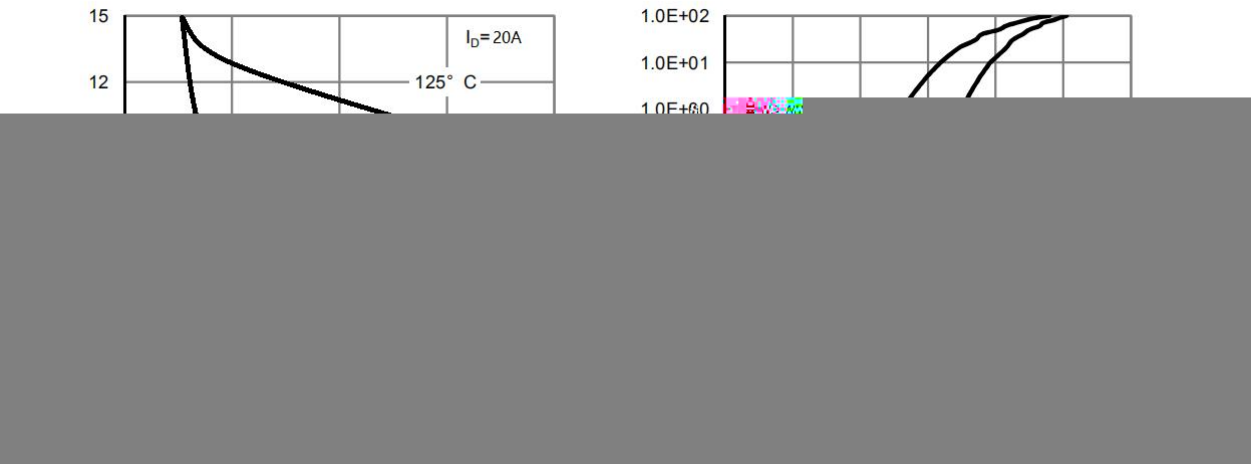
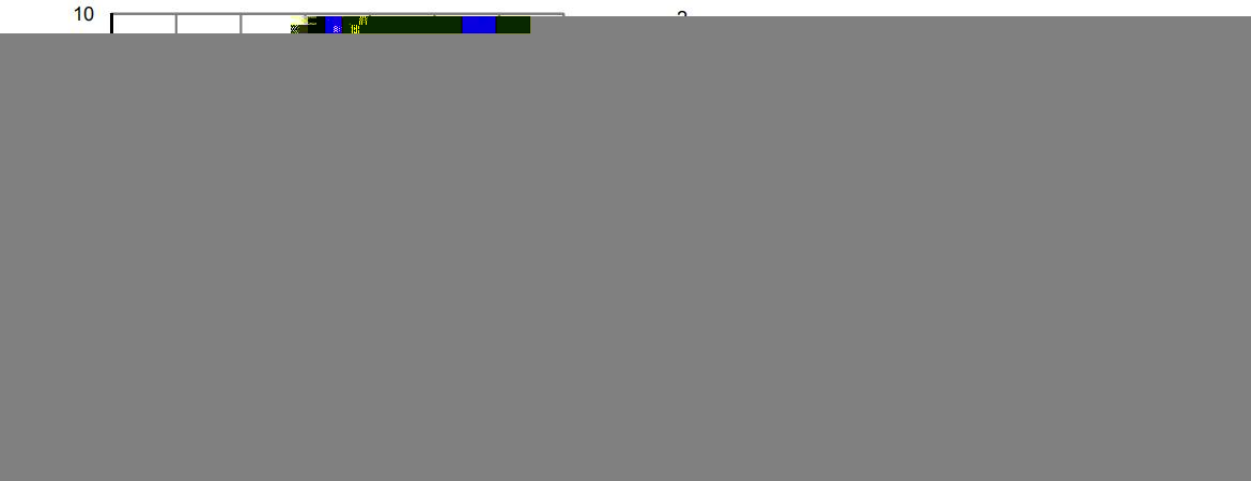
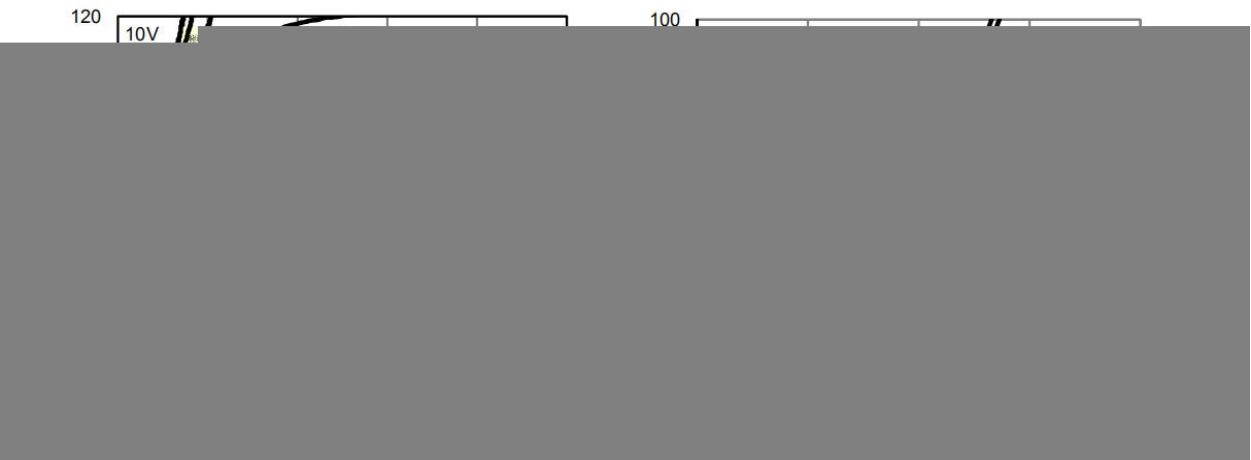
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Drain Current	$I_D(T_C=25^{\circ}C)$	40	A
Drain Current - Pulsed	I_{DM}	130	A
Gate-Source Voltage	V_{GSS}	± 20	V
Single Pulsed Avalanche Energy	E_{AS}	211	mJ
Avalanche Current	I_{AS}	23	A
Power Dissipation	$P_D(T_C=25^{\circ}C)$	29	W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to 150	$^{\circ}C$
Junction-to-Ambient	$t \leq 10$	$R_{\theta JA}$	$^{\circ}C/W$
Junction-to-Ambient	Steady-State		
Junction-to-Case	Steady-State		
		$R_{\theta JC}$	4.2

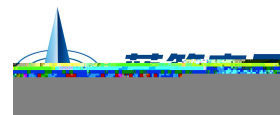
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	30	32		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V$ $V_{GS}=0V$			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V$				

V



/ Electrical Characteristic Curve

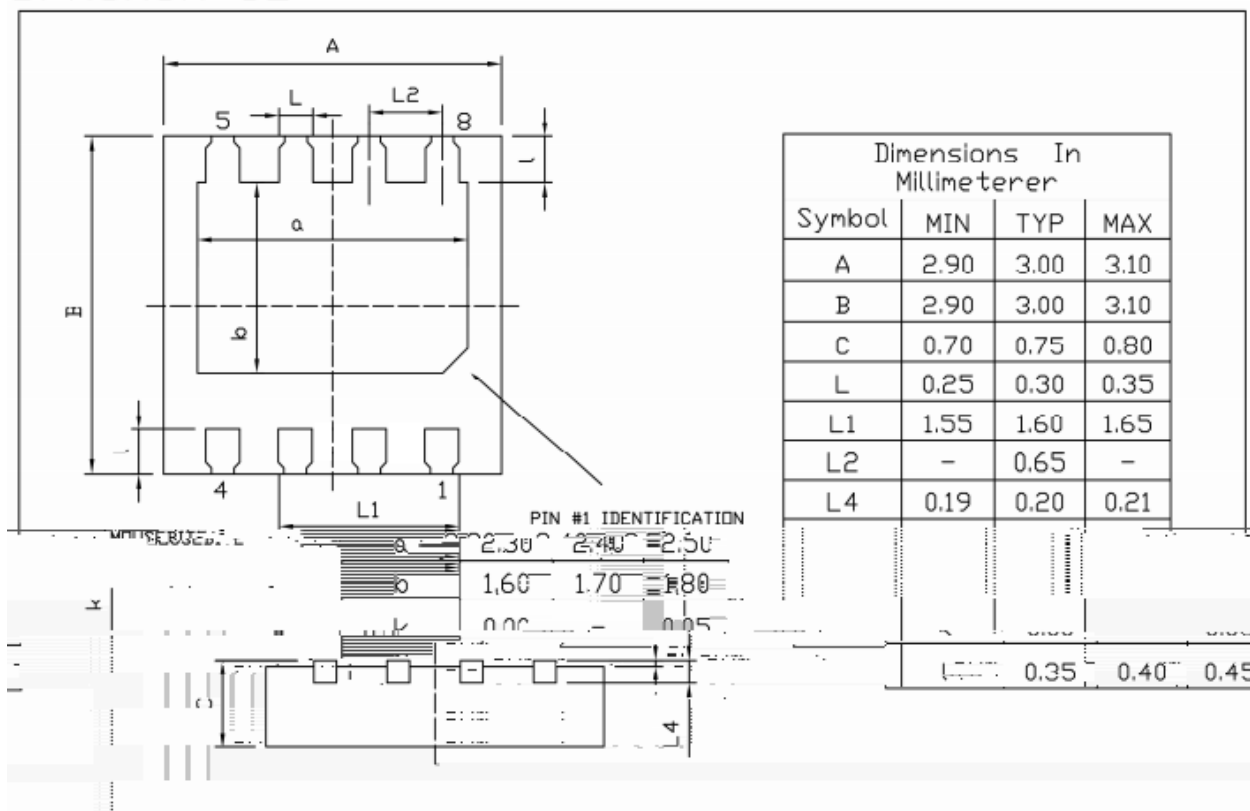


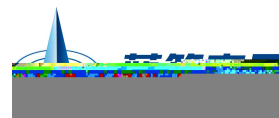


/ Package Dimensions

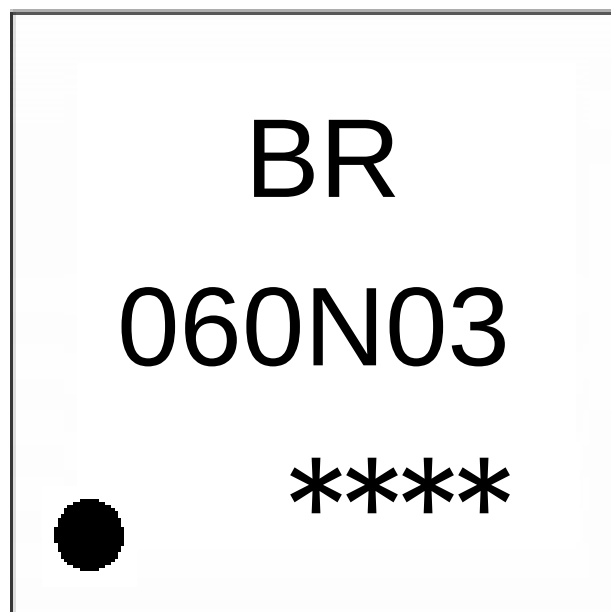
DFN3X3A-8L

Unit:mm





/ Marking Instructions



BR

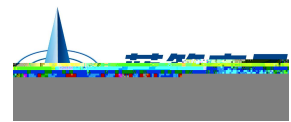
060N03

Note:

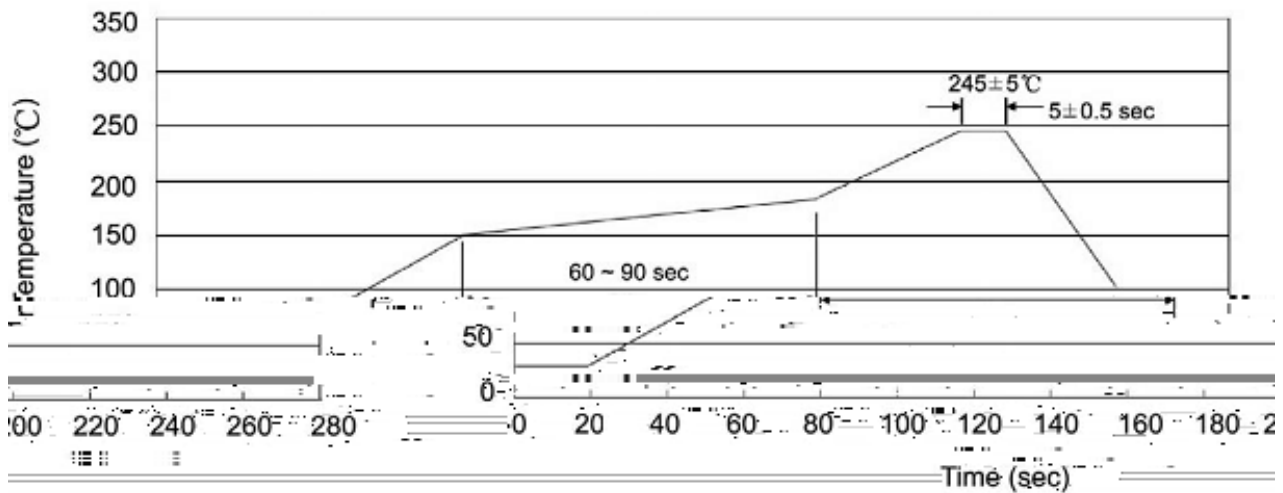
BR: Company Code.

060N03: Product Type Code.

****: Lot No. Code, code change with Lot No.



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



Note:

- | | | | | | |
|---|-------|-----|-----------|--------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

260±5°C 10±1 sec. Temp.:260±5°C Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box	Outer Box
DFN 3*3A-8L	5,000	2	10,000	6	60,000	13" ×12	360×360×50	380×335×366

/ Notices