

BRCs070N03DSC

Rev.A Jul.-2023

描述 / Descriptions

SOP-8 N MOS

Double N-CHANNEL MOSFET in a SOP-8 Plastic Package.

特征 / Features

$$V_{DS}(V)=30V \quad I_D=16.5A$$
$$R_{DS(ON)}@10V < 7m\Omega (Typ. 6.3mR)$$
$$R_{DS(ON)}@4.5V < 12m\Omega (\text{Typ. } 9.5mR)$$

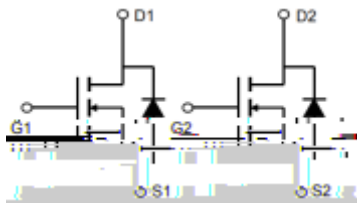
Halogen-free Product.

用途 / Applications

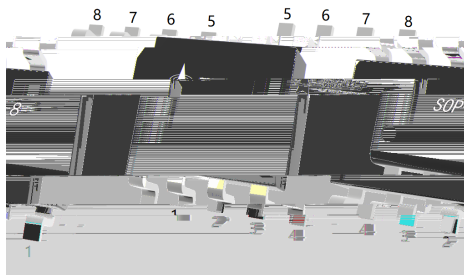
MB/NB/UMPC/VGA, DC-DC,

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

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1	S1	PIN 2	G1	PIN 3	S2	PIN 4	G2
PIN 5	D2	PIN 6	D2	PIN 7	D1	PIN 8	D1

印章代码 / Marking

See Marking Instructions.

Parameter

电性能参数 / Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=15\text{ V}$ $V_{GS}=10\text{V}$ $R_L=0.75\Omega$ $R_{GEN}=3\Omega$		11		ns
Turn-On Rise Time	t_r			14		ns
Turn-Off Delay Time	$t_{d(off)}$			38		ns
Turn-Off Fall Time	t_f			10		ns

电参数曲线图 / Electrical Characteristic Curve

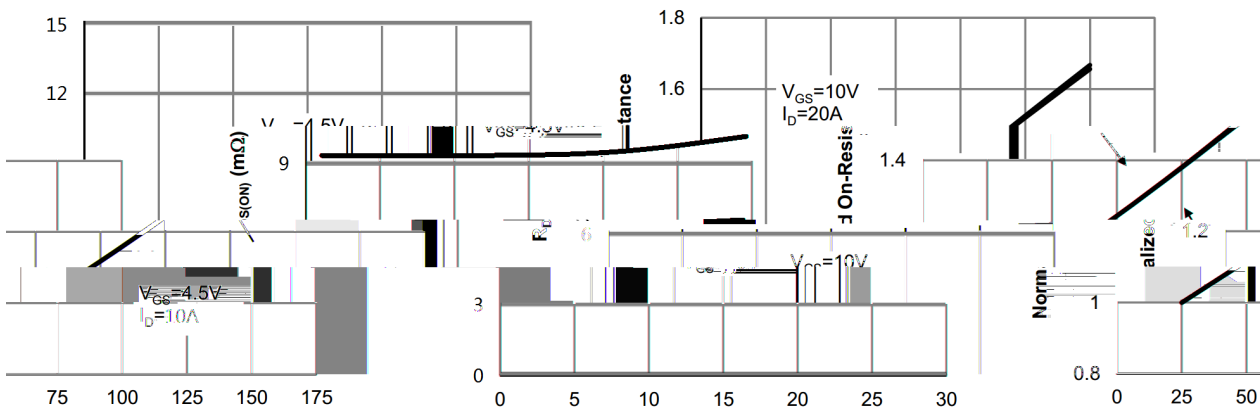
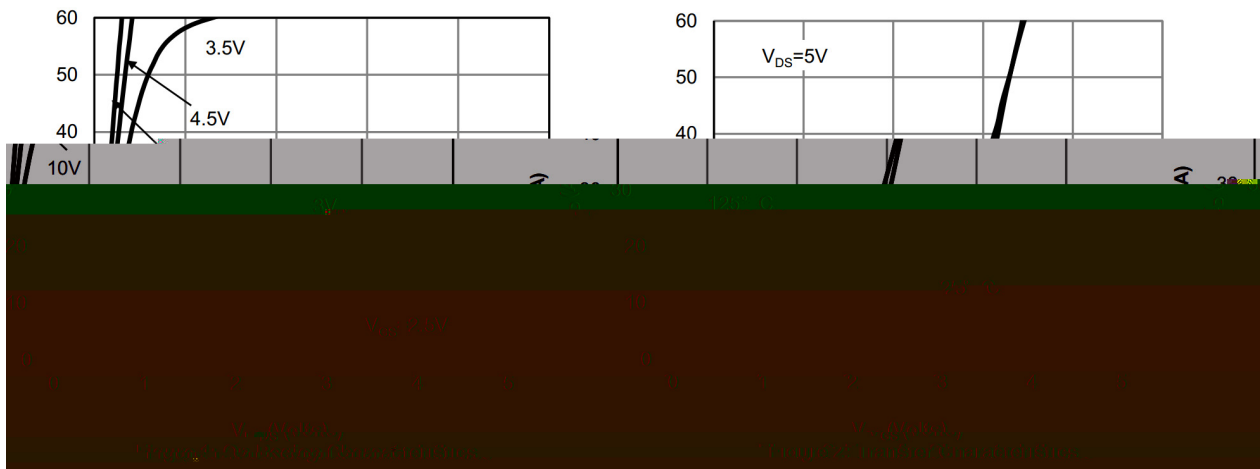


Figure 4: On-Resistance vs. Drain Current and Gate Voltage

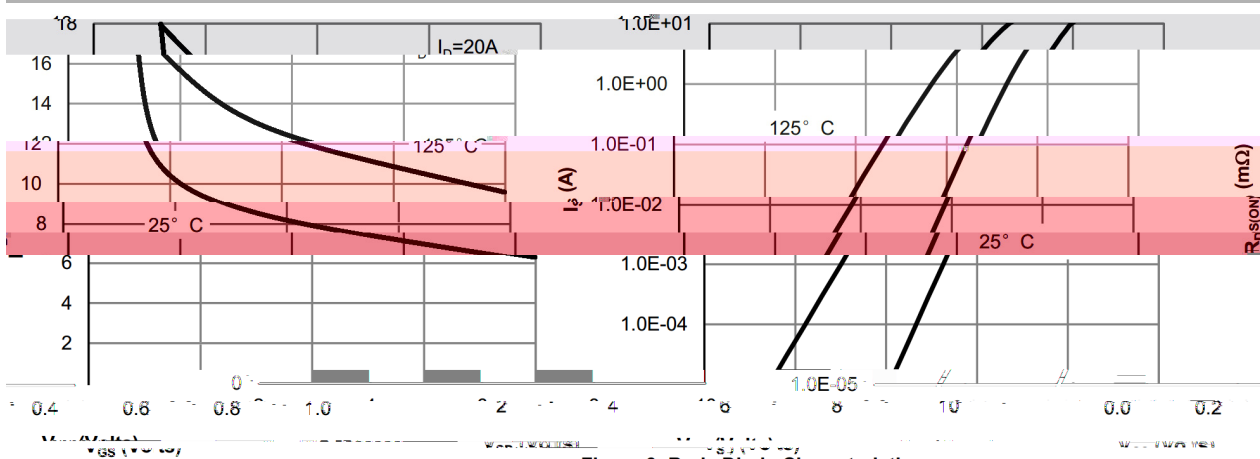
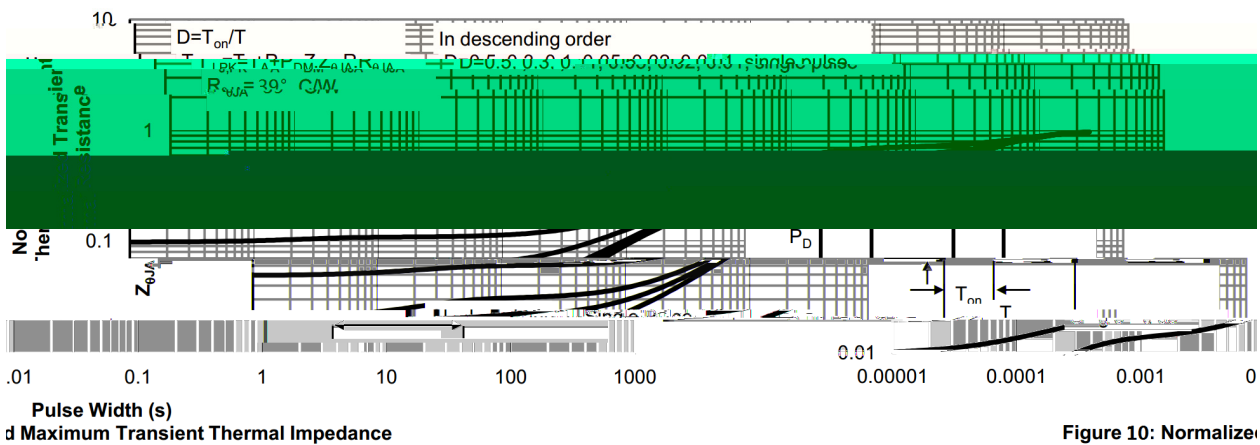
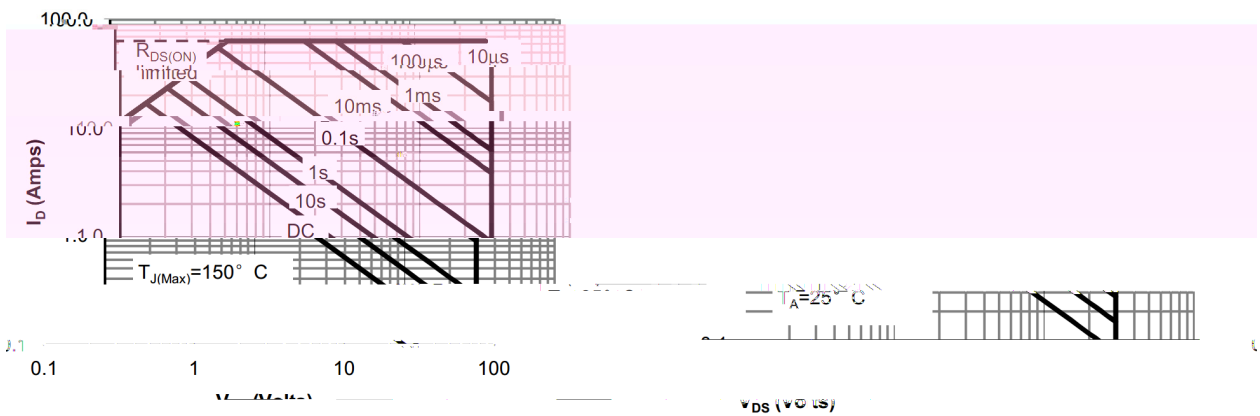
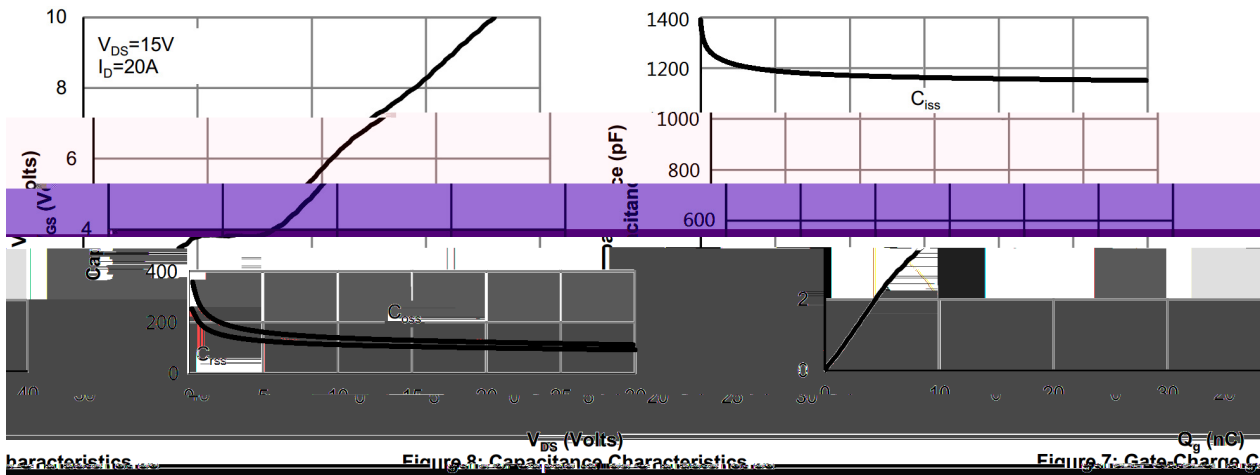


Figure 6: Body-Diode Characteristics

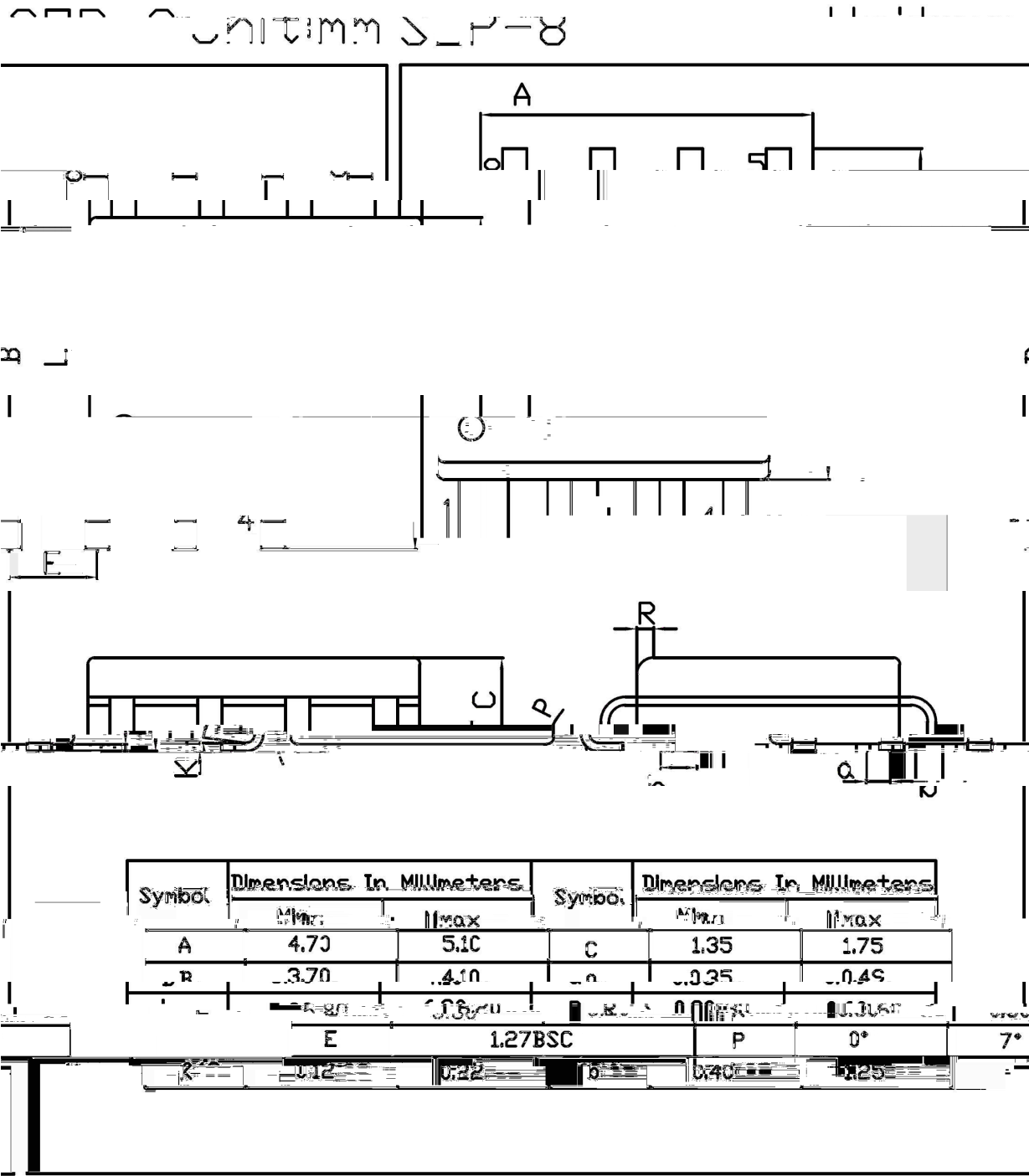
Figure 5: C

On-Resistance vs. Gate-Source Voltage

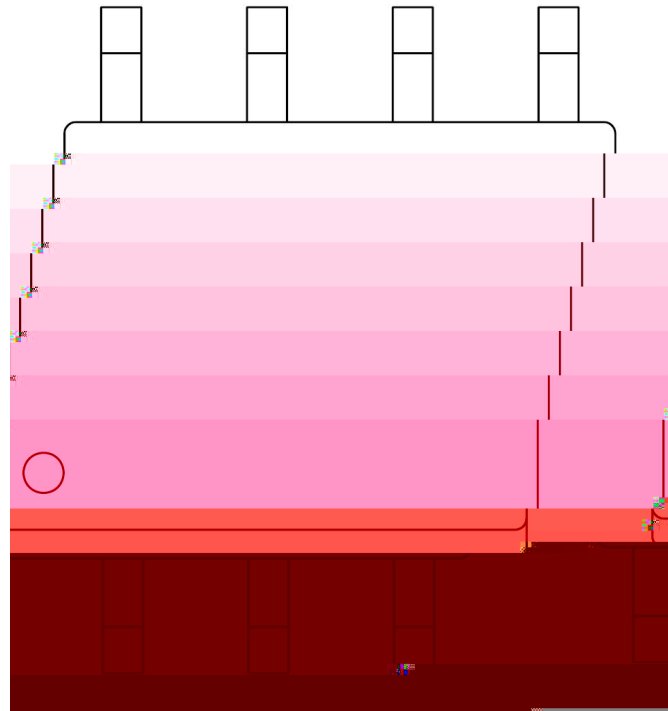
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



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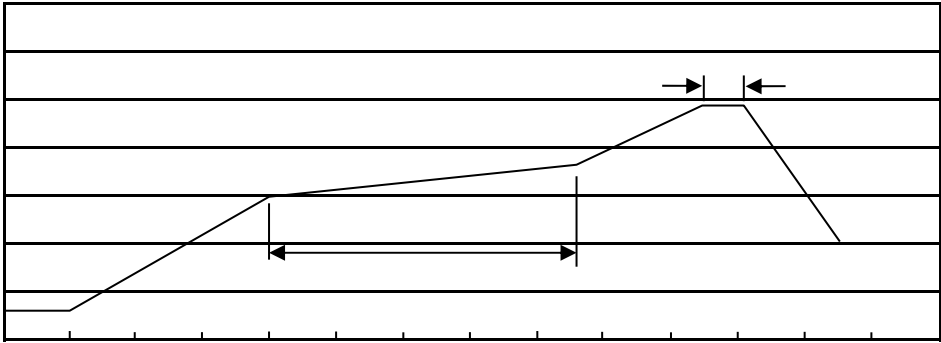
070N03D

Note:

BR: Company Code

070N03D: Product Type

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

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

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

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

包装规格 / Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOP/ESOP-8	4,000	2	8,000	6	48,000	13 ×12	360×360×50	380×335×366

使用说明 / Notices