

BRCS080N03DSC

Rev.A Aug.-2023

DATA SHEET

/ Descriptions

JF G\$/ E ' D F J'
 ; f l Y d ' E \$? 8 E E < C D F J = < K ' e X J F G \$ / ' G & j k Z ' G X Z b X ^ \ %
 .

/ Features

$V_{DS}(V)=30V$ $I_D=16A$
 $R_{DS(ON)}@10V<8m$ (Typ. 7.6mR)
 $R_{DS(ON)}@4.5V<12m$ (Typ. 10.8mR)
 HF Product.

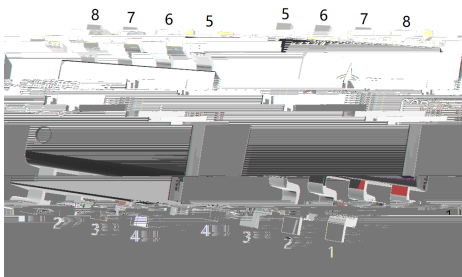
/ Applications

D 9&E 9&L D G: &M> 8 # ; : \$: #
 ? ^ _ ' = i \ h l \ e Z p ' G f ' e k \$ f] \$ C f X [' J p e Z _ i f e f l j ' 9 l Z b : f e m i k i '] f i ' D 9&E 9&L D G: &M> 8 #
 E \ n f i b e ^ e ^ ; : \$: ' G f n \ i ' J p j k d # C f X [' J n ' k Z _ %
 .

/ Equivalent Circuit



/ Pinning



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

/ Marking

See Marking Instructions.

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Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	16	A
Pulsed Drain Current	I_{DM}	59	A
Power Dissipation	P_D	3.2	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	
Maximum Junction-to-Ambient	$R_{JA}(\text{Steady-State})$	39	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	30	35		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V$ $V_{GS}=0V$			1	μA
Gate-Body leakage current	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	1.0	1.7		

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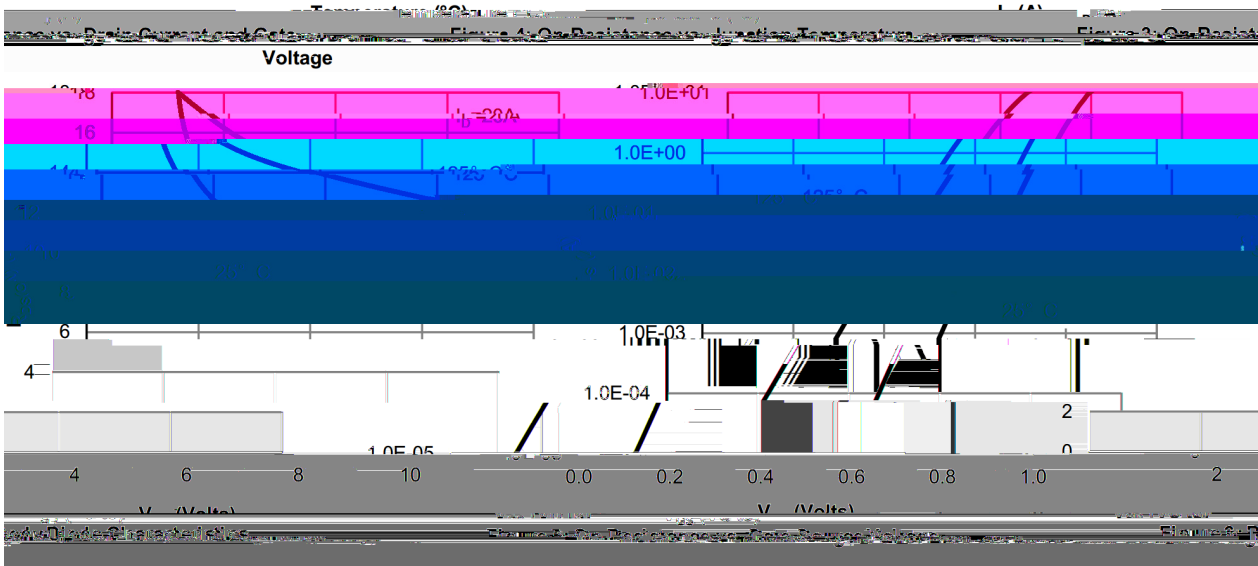
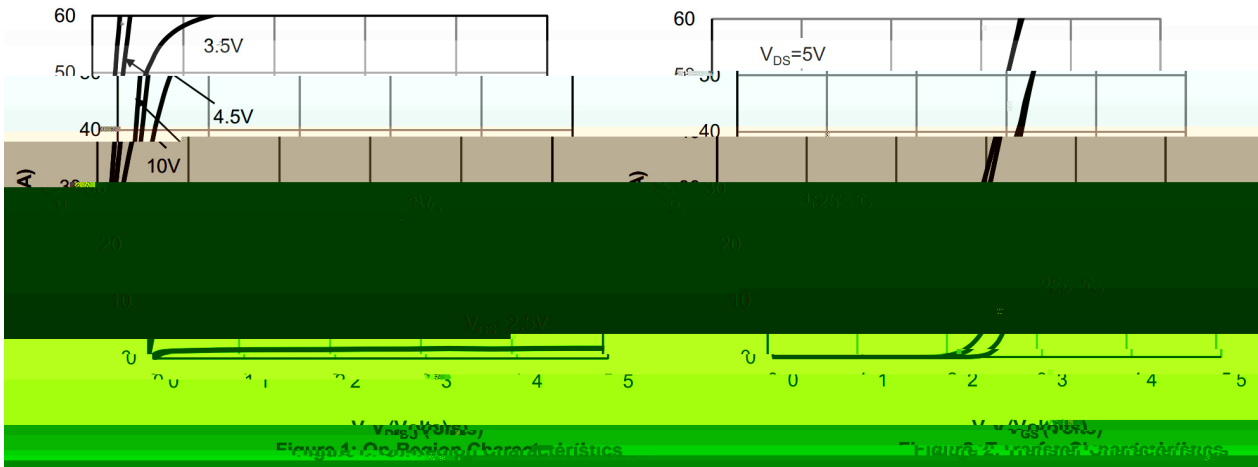
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Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=15\text{ V}$ $V_{GS}=10\text{ V}$ $R_{\theta JC}=10\text{ }^{\circ}\text{C/W}$ $T_c(=15\text{ }^{\circ}\text{C})$ $T_j=385\text{ }^{\circ}\text{C}$ $I_{Tf}=3300008\text{ A}$ $T_{57TcTc}(\text{ }^{\circ}\text{C})$ $T_j=1<020\text{ }^{\circ}\text{C}$				

/ Electrical Characteristic Curve

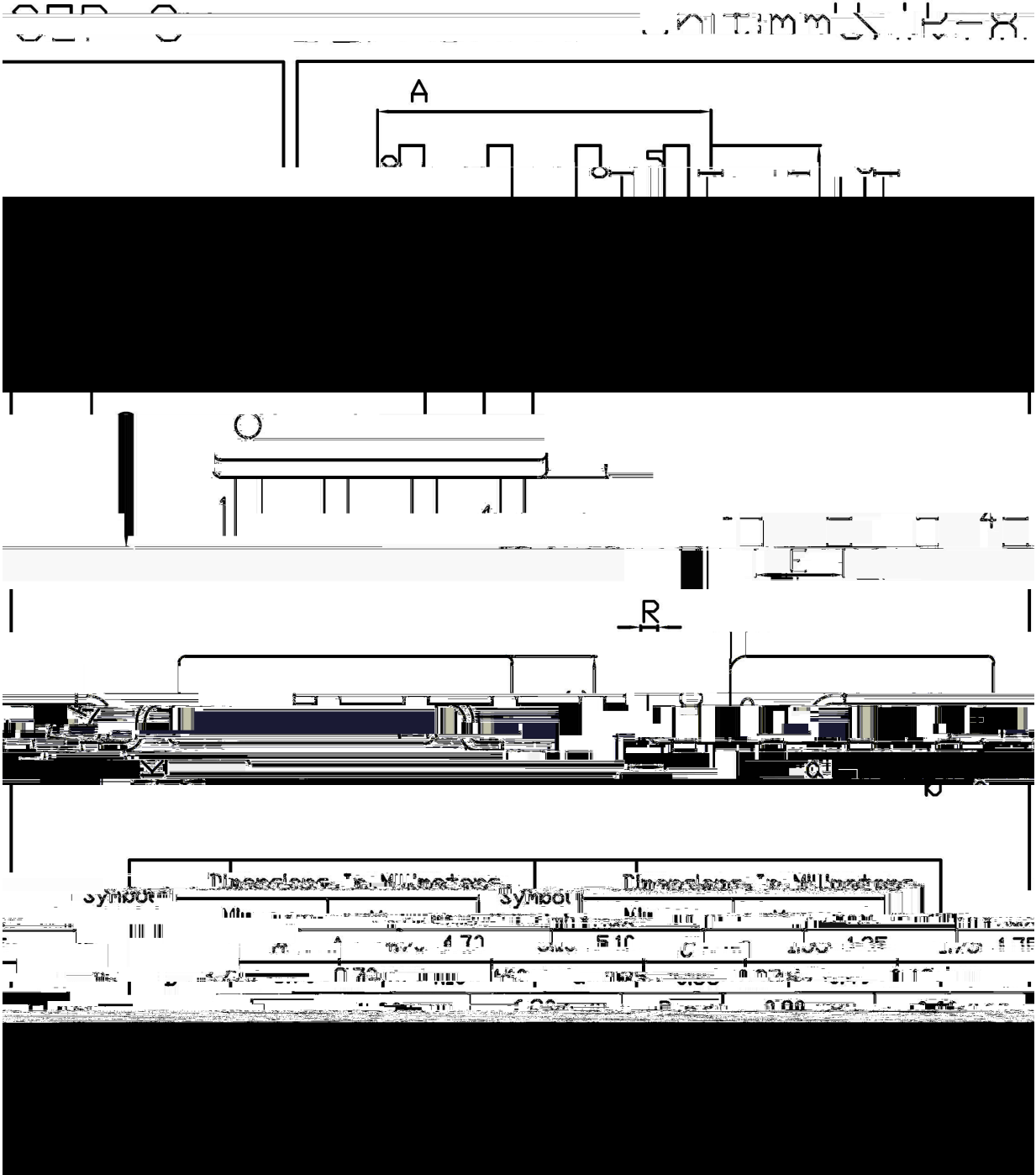


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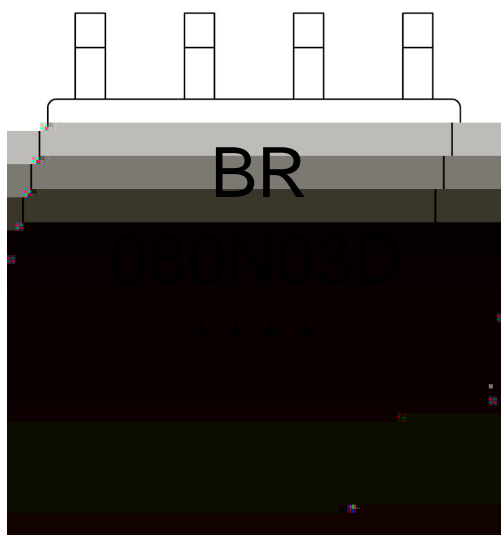


DATA SHEET

/ Package Dimensions



/ Marking Instructions



BR

080N03D

Note:

BR: Company Code

080N03D: Product Type

****: 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 , 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. |

/ Resistance to Soldering Heat Test Conditions

605..5