

BRD65R280C

Rev.B May.-2022



DATA SHEET

/ Revised record

A	2022.4.28	ALL	AOS-AOD280A60		
B	2022.5.26	2,3,4,5	YC-RMX65R280SN_ReV1.1		

/ Descriptions

TO-252 N 650V

N-CHANNEL 650V Super-Junction Power MOSFET in a TO-252 Plastic Package.

/ Features

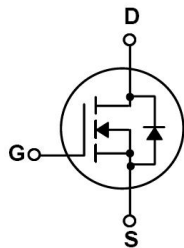
 $R_{DS(on)}$ C_{rss} Low $R_{DS(on)}$, low gate charge, low C_{rss} , fast switching, HF Product.

/ Applications

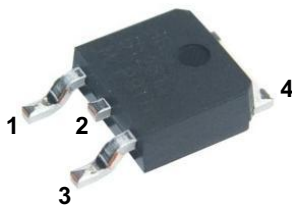
DC/DC

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

/ Equivalent Circuit



/ Pinning



PIN1 G

PIN 2 D

PIN 3 S

PIN 4 D

/ Marking

See Marking Instructions.

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参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Drain-Source Voltage	V_{DSS}	650	V

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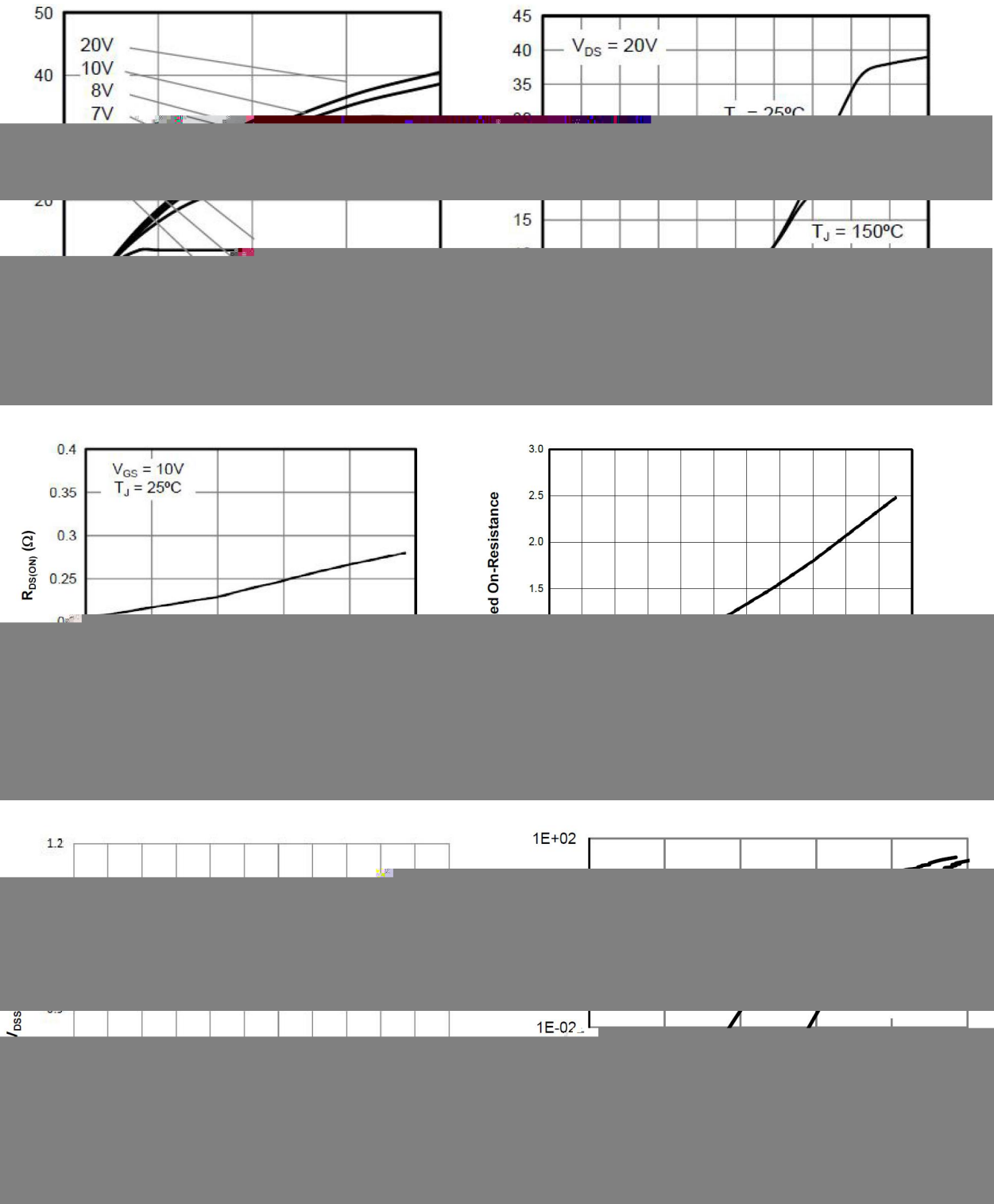
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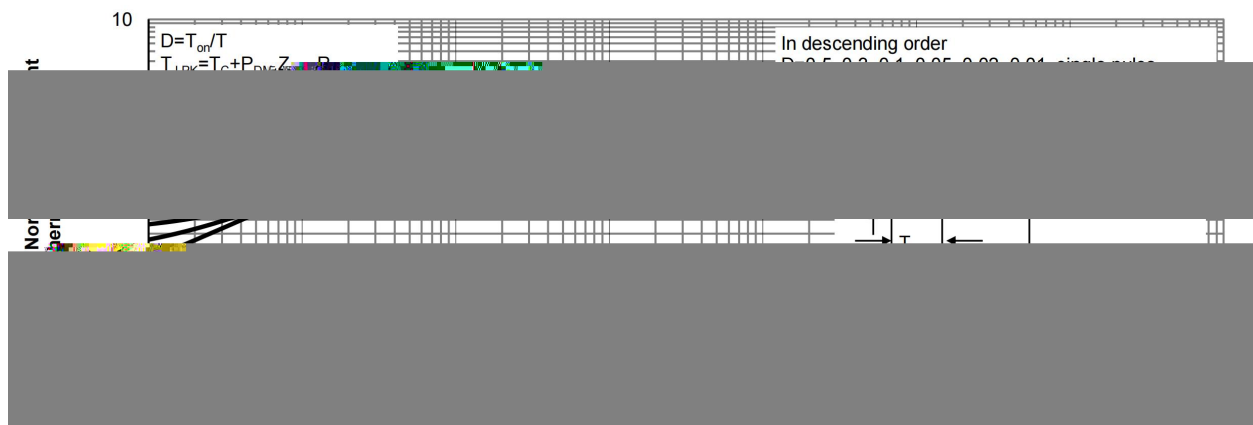
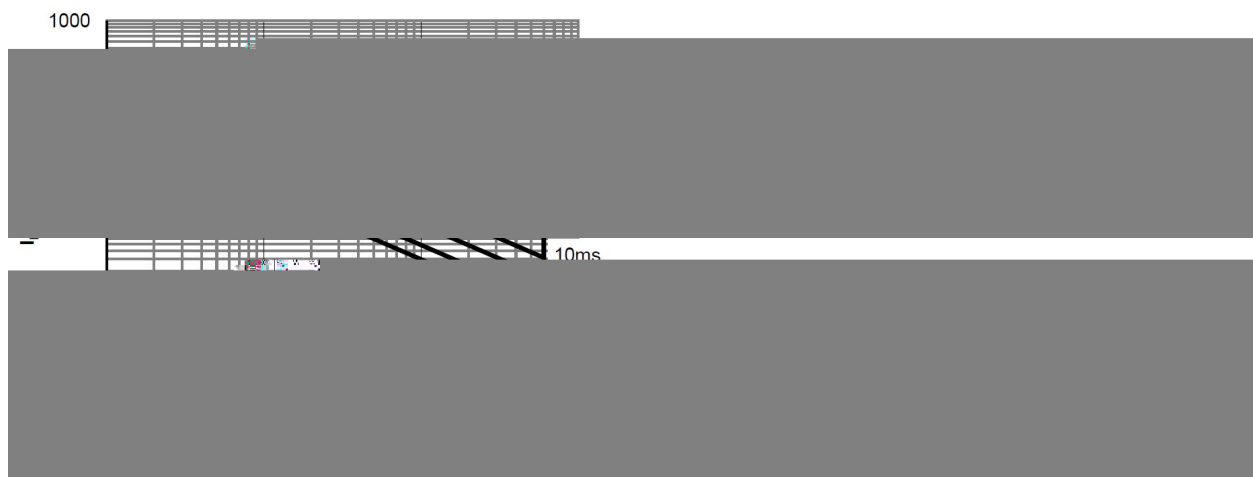
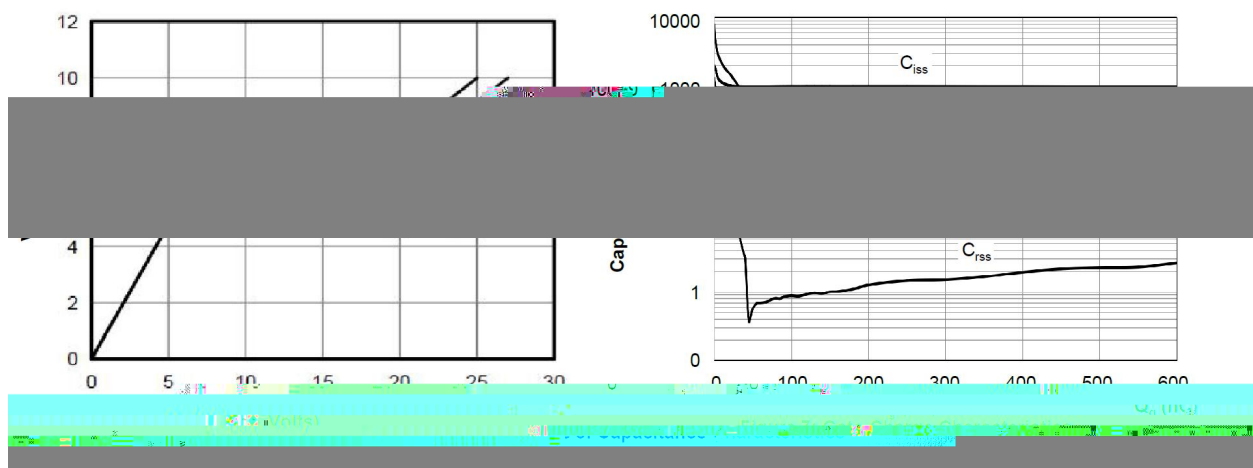
DATA SHEET

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Ma	单位 Unit
Continuous Diode Forward Current	I_S				14	A
Total Gate Charge	g	$V_{DS}=520V \quad I_D = .5A$ $V_{GS}=10V$		26		nC
Gate-Source Charge	g_s			3.6		nC
Gate-Drain Charge	g_d			10.5		nC
Reverse recovery time	t_{rr}	V_R				

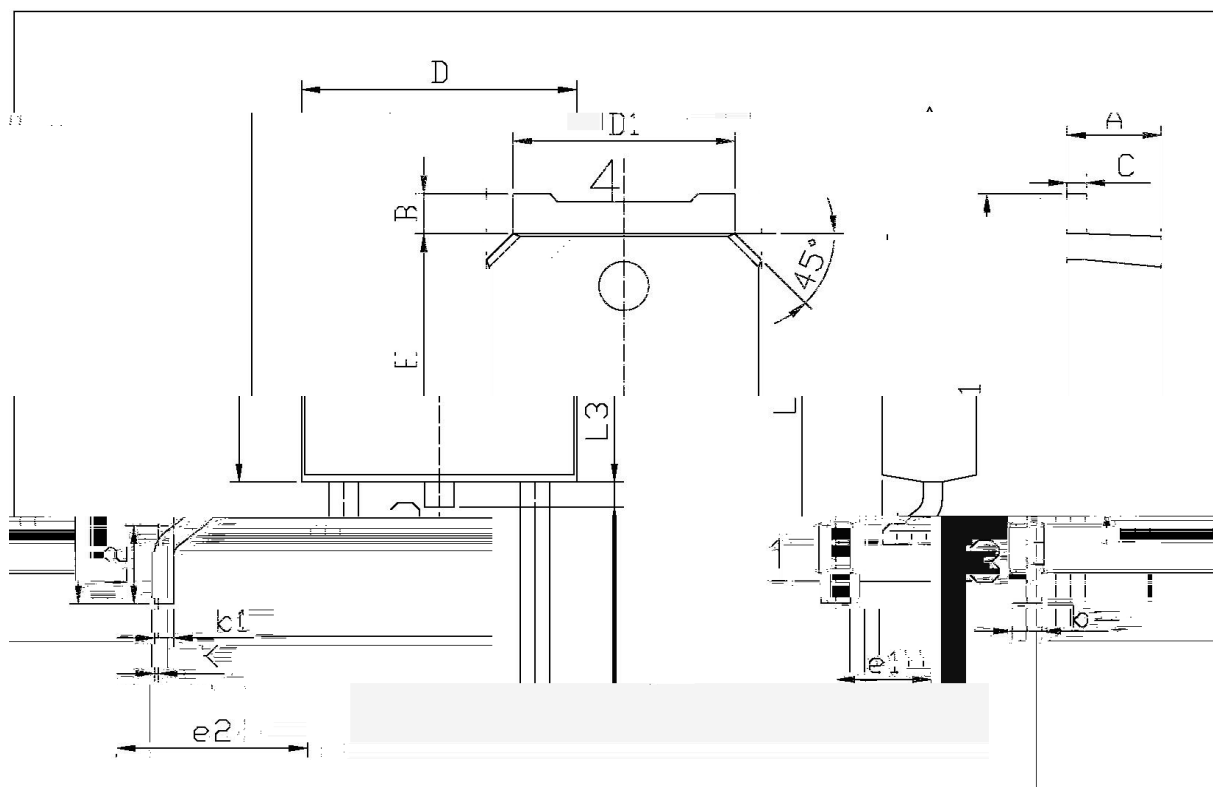
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



/ Package Dimensions

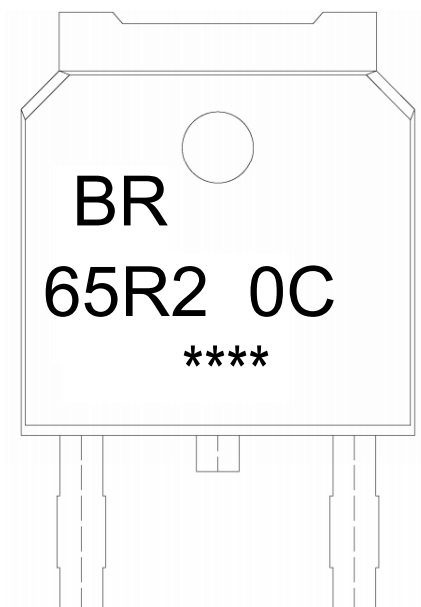


单位: mm

Dipentagon, 10 Millionths			Dipentagon, 10 Millionths		
Symbol	M.F.	M.A.	Symbol	M.F.	M.A.
A	2.20	2.40	B	2.25	2.25
B	0.95	1.25	C	2.24	2.32
C	0.20	0.30	D	1.25	1.25
E	0.45	0.55	F	9.85	10.35
G	2.00	0.45	H	0.55	1.20
I	3.75	0.60	J	0.90	1.70
K	0.60	0.60	L	6.45	
M	0.00	0.00	N	0.00	0.00
O	0.00	0.00	P	0.00	0.00
Q	0.00	0.00	R	0.00	0.00
S	0.00	0.00	T	0.00	0.00
U	0.00	0.00	V	0.00	0.00
W	0.00	0.00	X	0.00	0.00
Y	0.00	0.00	Z	0.00	0.00

TN-252

/ Marking Instructions



BR

Note:

BR: Company Code

65R2 0C: Product Type Code

: Lot No. Code, code change with Lot No

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

Note:

- | | | | |
|---|------------|----------|---|
| 1 | 150 1 0 | 60 0sec | 1.Preheating:150 1 0 , Time:60 0sec. |
| 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

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

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (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 盒	Outer Box 箱
TO-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box			