

BRSC65R1K0ZDP

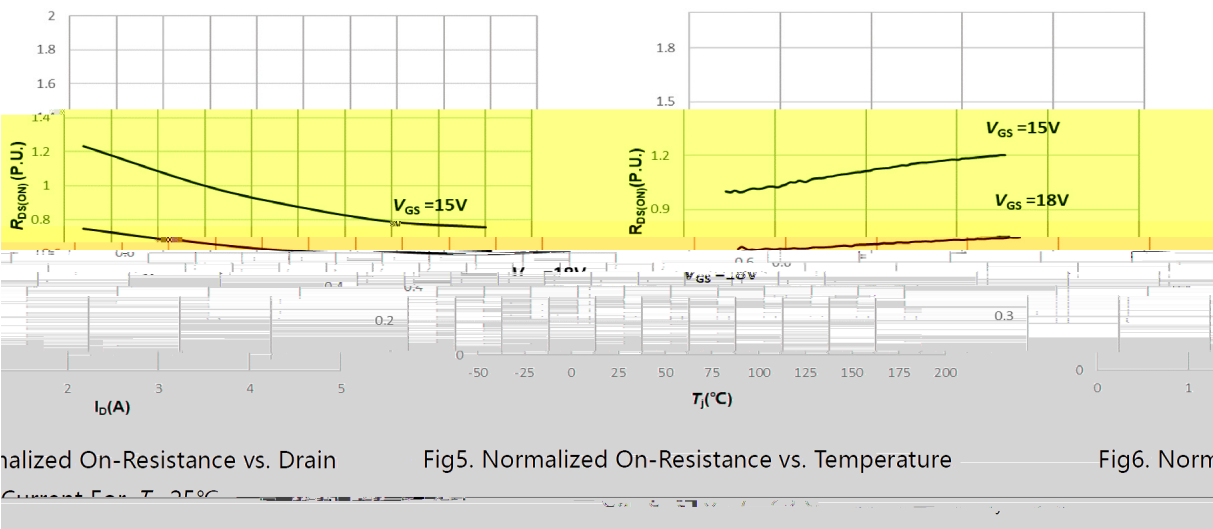
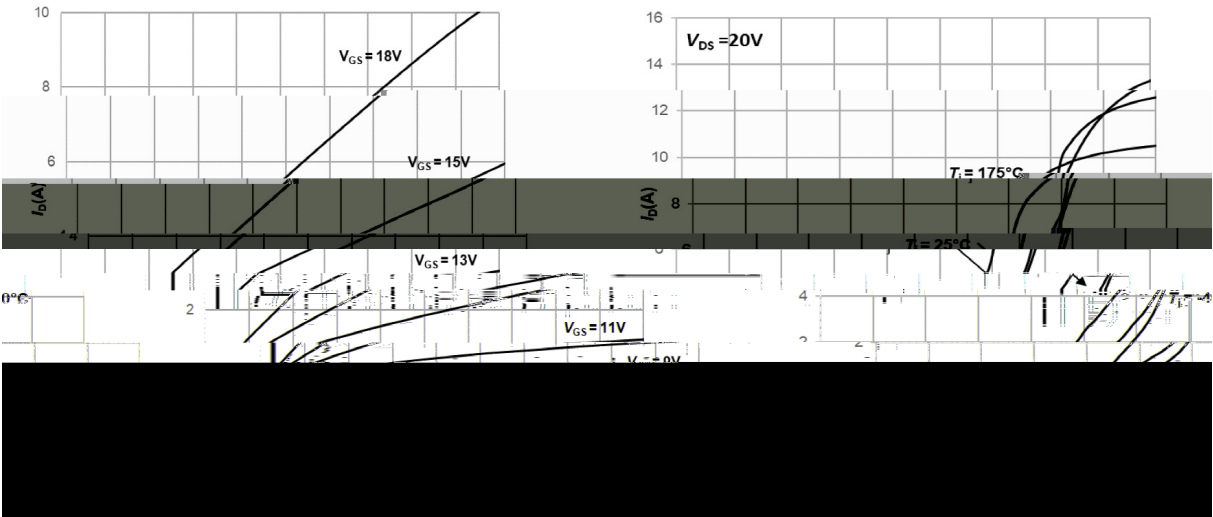
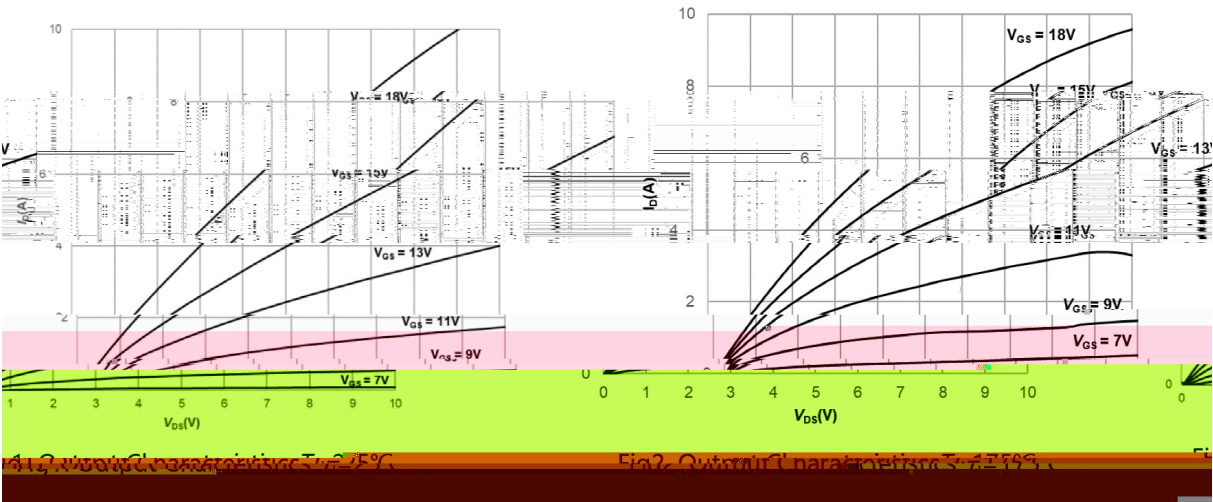
Rev.B Jul.-2026



DATA SHEET

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate resistance	R _g	V _{AC} =25mV f=1MHz		11.8		Ω
Input Capacitance	C _{iss}	V _{DS} =400V V _{GS} =0V f=100kHz		125		pF
Output Capacitance	C _{oss}			11		
Reverse Transfer Capacitance	C _{rss}			1		
Total Gate Charge	Q _g	V _{GS} =0/15V, V _{DS} =400V,				

/ Electrical Characteristic Curve



/ Electrical Characteristic Curve

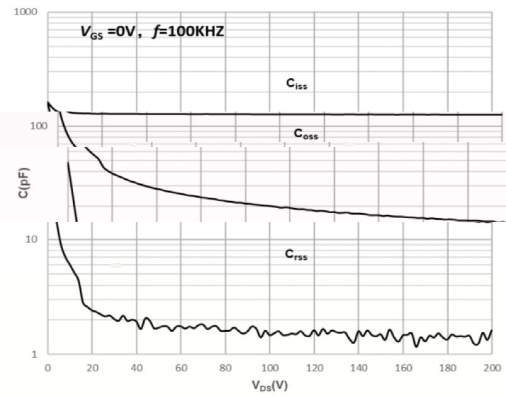
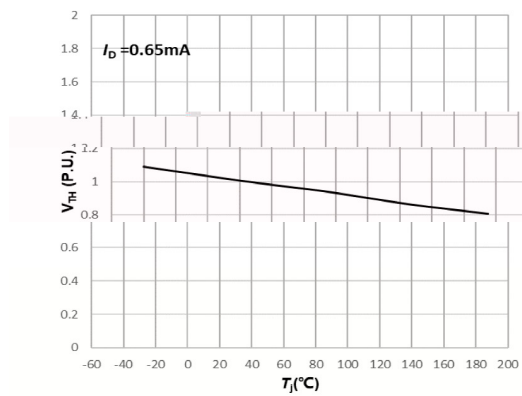


Fig.7. Normalized Threshold Voltage vs. Temperature. Fig.8. Capacitances vs. Drain-Source Voltage (0~200V), $f = 100KHZ$.

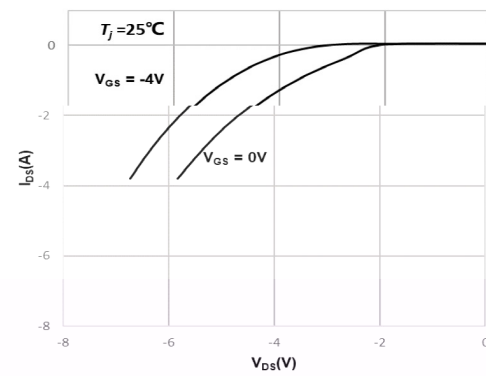
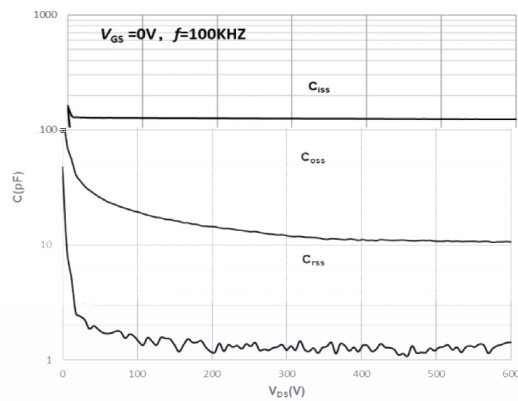


Fig.9. Capacitances vs. Drain-Source Voltage (0~600V). Fig.10. Transfer Characteristics (25°C).

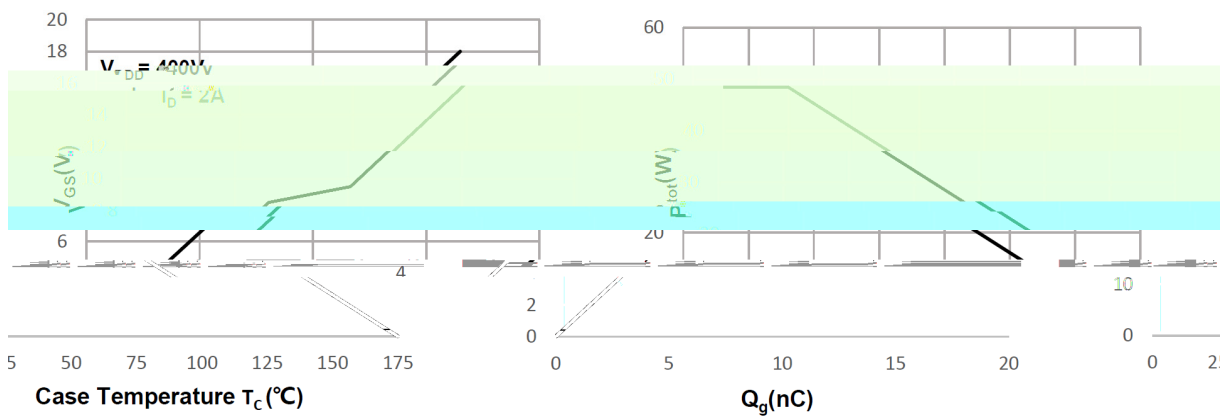
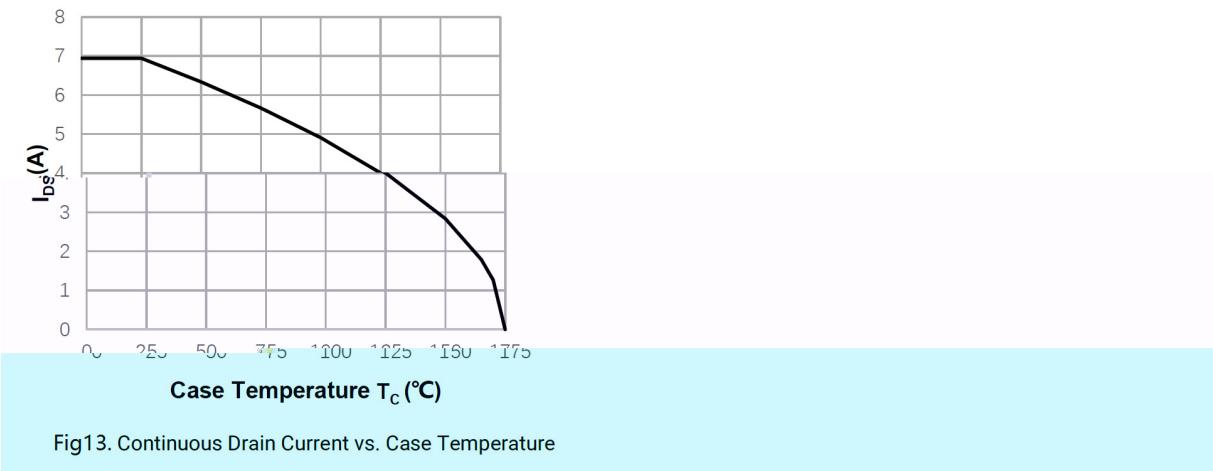
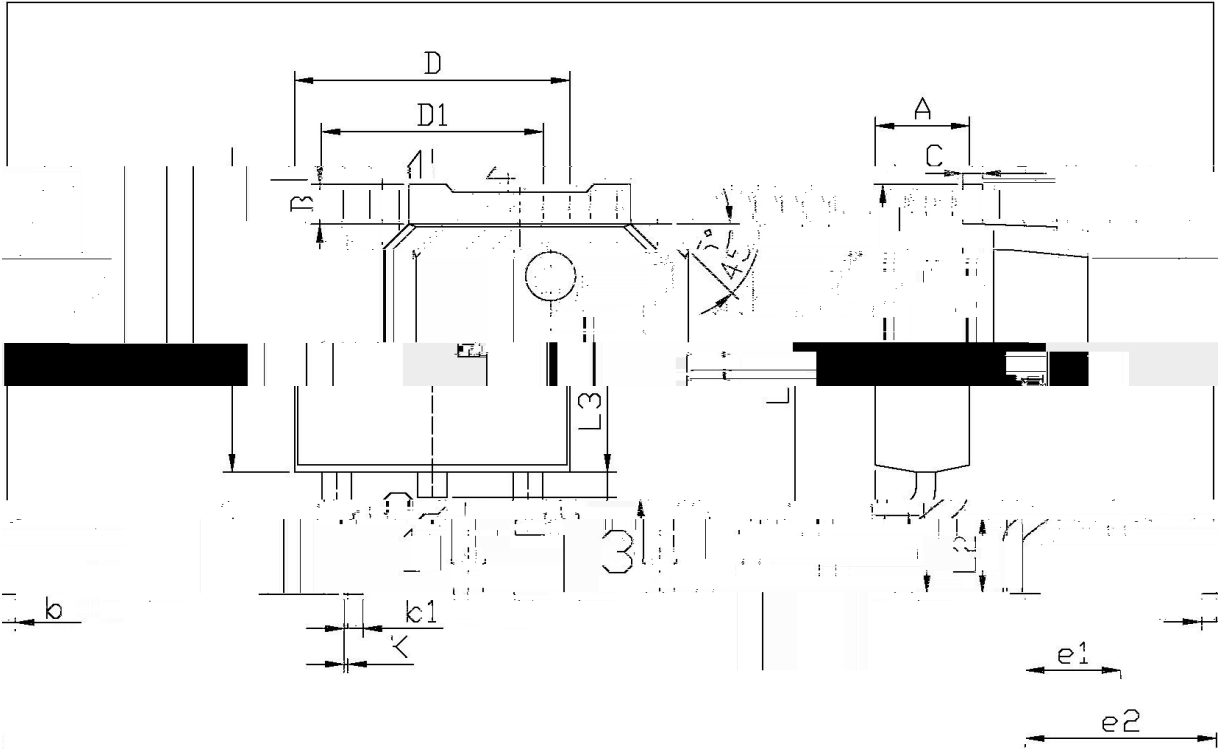


Fig.11. Safe Operating Area (SOA) and Thermal Characteristics.

/ Electrical Characteristic Curve



I Package Dimensions



单位: mm

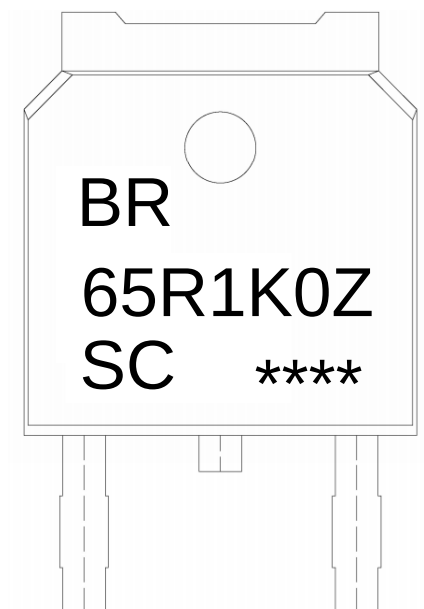
Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	B	0	0.95
e1	2.24	2.34	b1	0.45	0.70
L1	9.85	10.35	D1	5.10	5.50
L3	0.90	1.00			
K	0.00	0.10			

-252

T□-



/ Marking Instructions



BR

65R1K0Z

SC

Note:

BR: Company Code

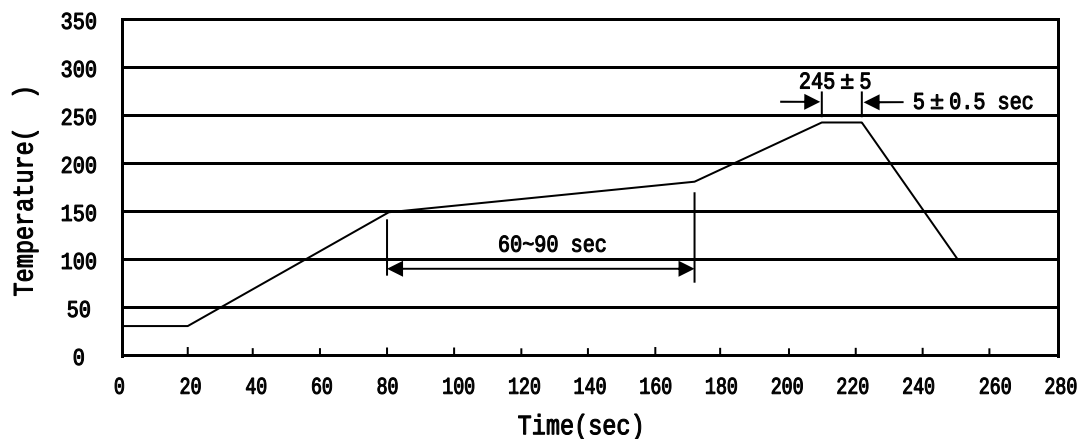
65R1K0Z: Product Type Code

SC: SiC

****: 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

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 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices

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