

# BRI65R380C

Rev.F Apr.-2022



DATA SHEET

D	2015-11				
E	2022-4-22	1			

AOS-AOD 380A 60

F 2022.4.21 ALL

## / Descriptions

TO-251          N          650V

N-CHANNEL 650V Super-Junction Power MOSFET in a TO-251 Plastic Package.

## / Features

$R_{DS(on)}$                    $C_{rss}$

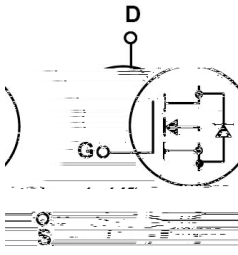
Low  $R_{DS(on)}$ , low gate charge, low  $C_{rss}$ , fast switching, HF Product.

## / Applications

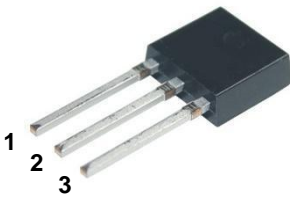
DC/DC

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

## / Marking

See Marking Instructions.

# BRI65R380C

Rev.F Apr.-2022



DATA SHEET

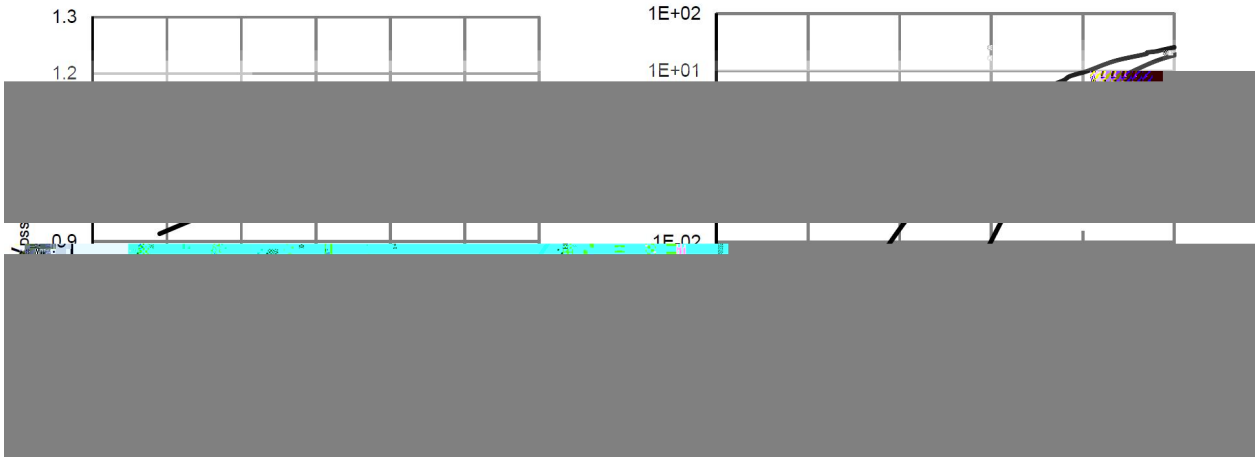
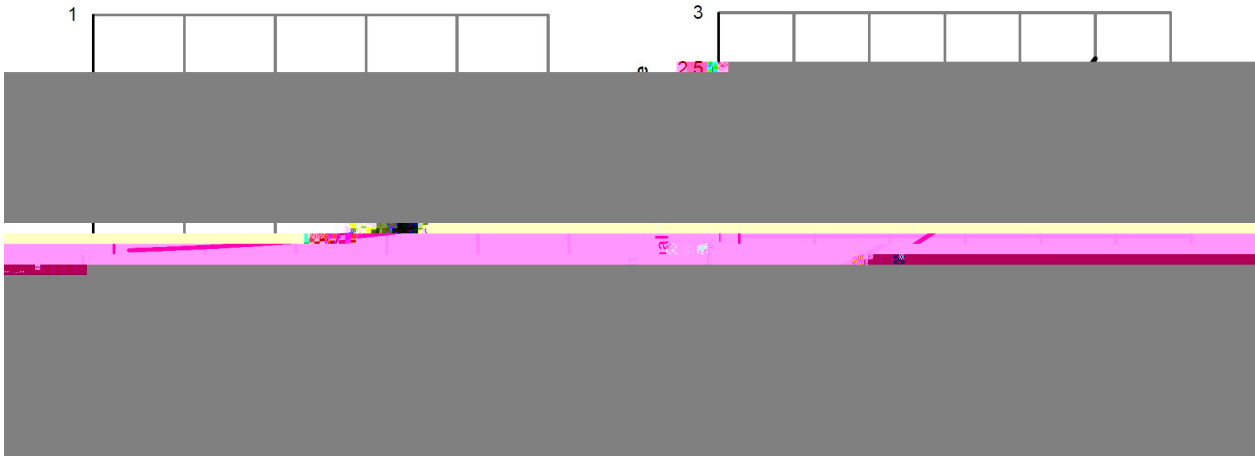
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	650	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	11	A
Drain Current - Pulsed	$I_{DM}$	44	A
Gate-Source Voltage	$V_{GS}$	$\pm 30$	V
Single Pulsed Avalanche Energy	$E_{AS}$	277	mJ
Avalanche Current	$I_{AS}$	8	A



**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous Diode Forward Current	$I_S$				11	A
Total Gate Charge	$Q_g$	$V_{DS}=480V$ $I_D=5.5A$ $V_{GS}=10V$		18		nC
Gate-Source Charge	$Q_{gs}$			7		nC
Gate-Drain Charge	$Q_{gd}$			4.5		nC

**/ Electrical Characteristic Curve**

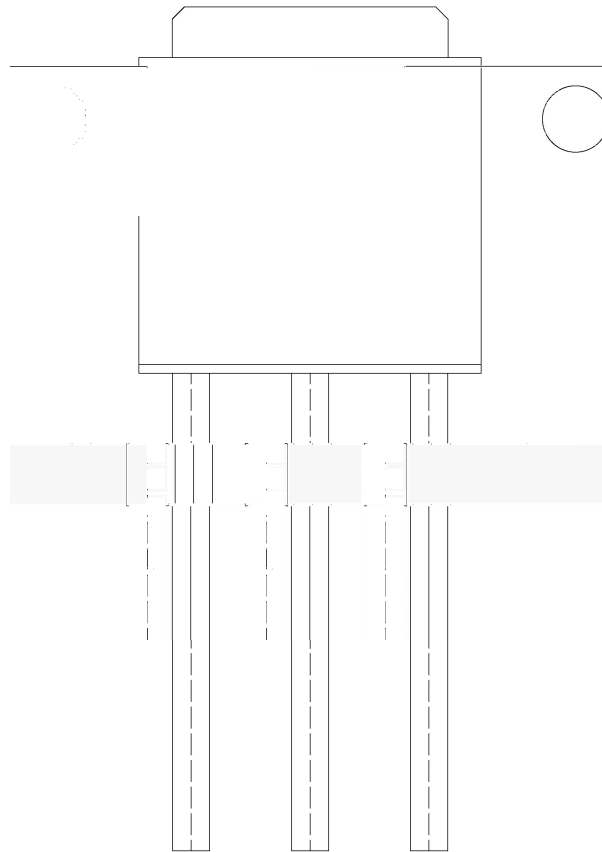


**BRI65R380C**

Rev.F Apr.-2022

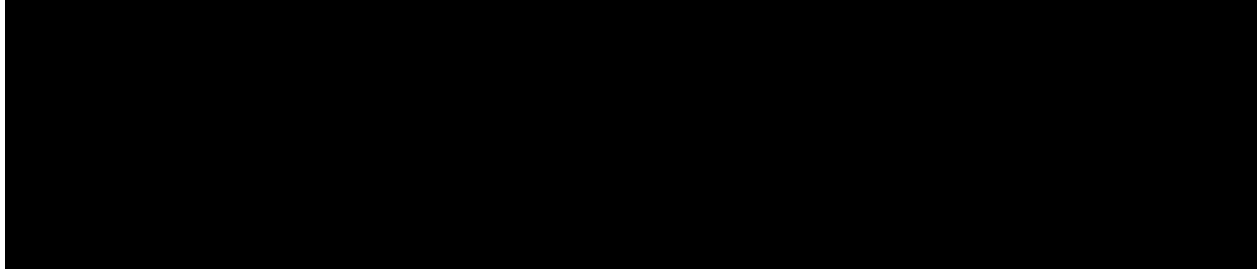
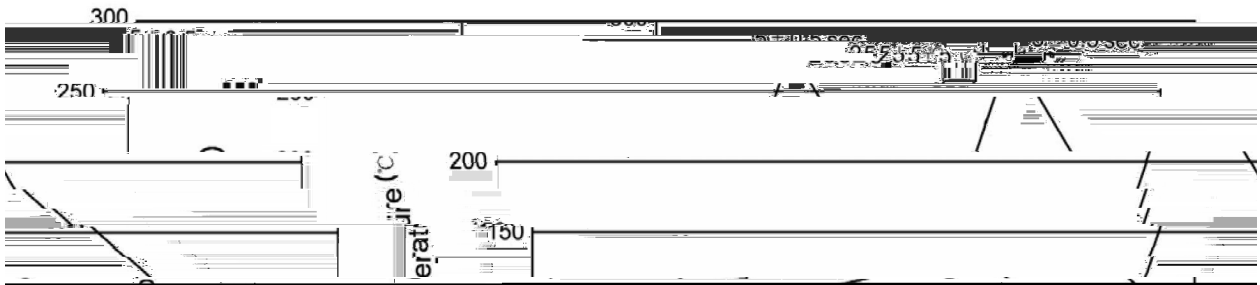
**DATA SHEET**







( ) /



**Note:**

- |   |       |     |           |        |  |
|---|-------|-----|-----------|--------|--|
| 1 | 25    | 150 | 60        | 90sec; | 1.Preheating:25~150°C, Time:60~90sec.    |
| 2 | 255±5 |     | 5±0.5sec; |        | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 |       | 2   | 10°C/sec. |        | 3. Cooling Speed: 2~10°C/sec.            |

**/ Resistance to Soldering Heat Test Conditions**

270±5°C                      10±1 sec.                      Temp.:270±5                      Time:10±1 sec

**/ Packaging SPEC.**

**/ BULK**

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag 袋	Inner Box 盒	Outer Box 箱
T0-251	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

**/ TUBE**

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube 套管	Inner Box 盒	Outer Box 箱
T0-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

**/ Notices**