

BRF65R380C

Rev.B May.-2022



DATA SHEET

/ Descriptions

TO-220F N 0V

N-CHANNEL 650V Super-Junction Power MOSFET in a TO-220F Plastic Package.

/ Features

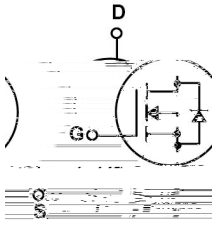
$R_{DS(on)} \times Q_g$ 100% ROHS

Very low $R_{DS(on)} \times Q_g$, 100% avalanche tested, RoHS compliant.

/ Applications

For switch mode power supply, uninterruptible power supply, power factor correction.

/ Equivalent Circuit



/ Pinning



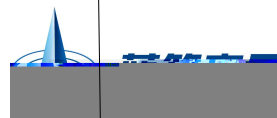
PIN1 G PIN 2 D PIN 3 S

/ Marking

See Marking Instructions.

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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}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	277	mJ
Avalanche Current	I_{AS}	8	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	27	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	
Junction-to-Case	R_{JC}		

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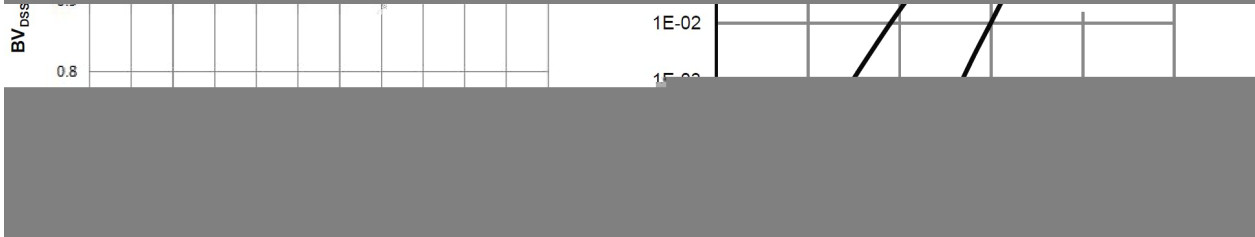
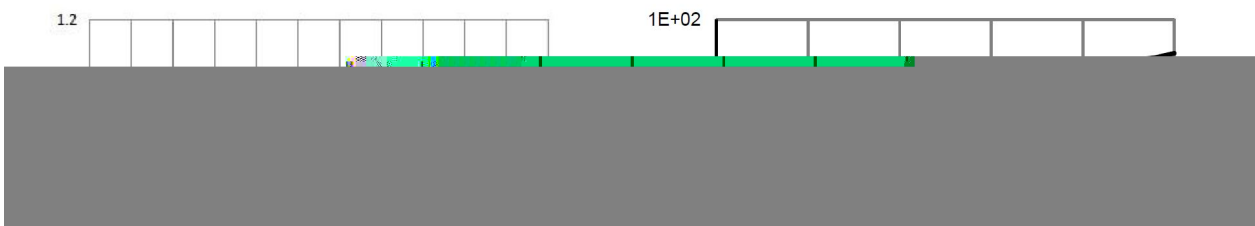
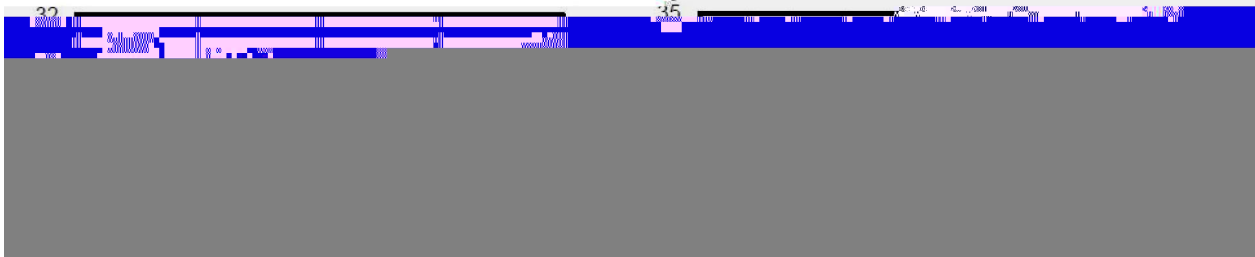
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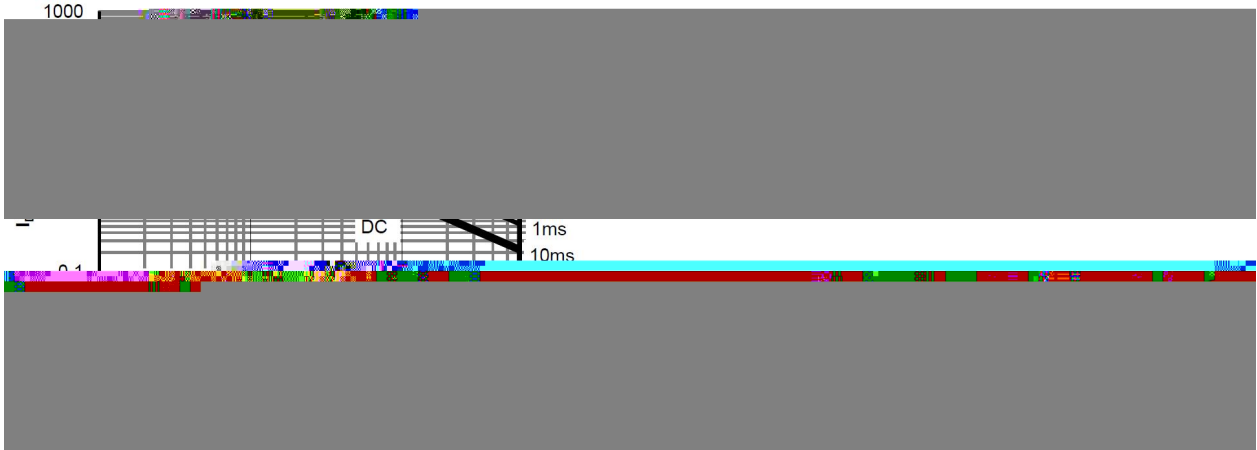
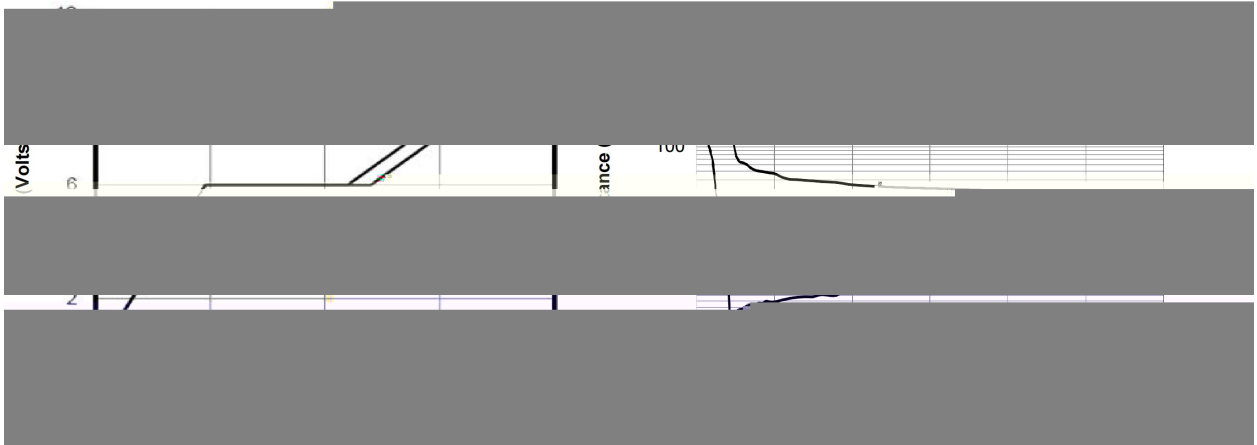
DATA SHEET

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous Diode Forward Current	I_S				11	A
Total Gate Charge Gate- u	Q_g	$V_{DS}=480V$ $I_D=5.5A$ $V_{GS}=10V$	-	19.2		nC

/ Electrical Characteristic Curve

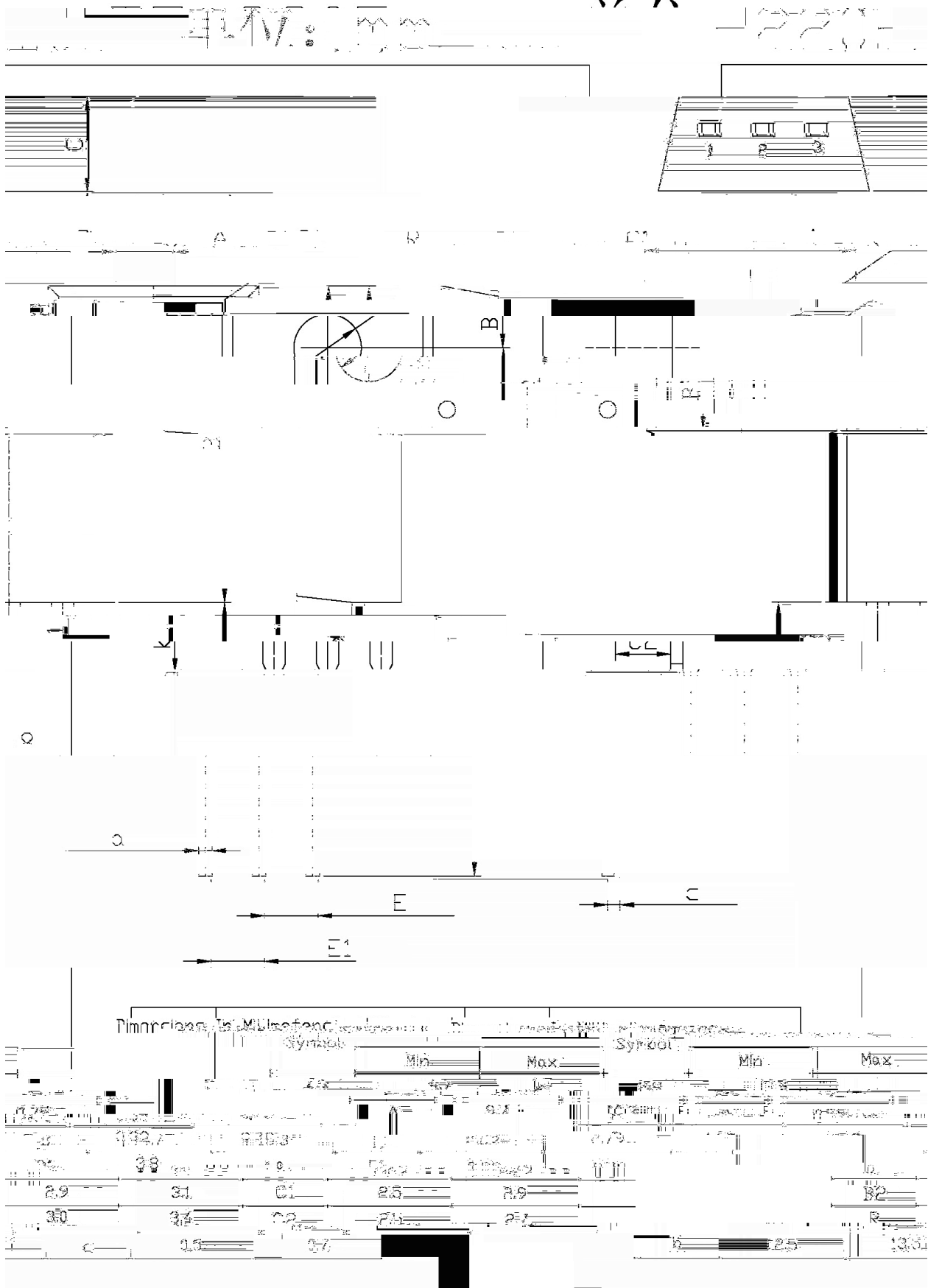


/ Electrical Characteristic Curve





/ Package Dimensions



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