

BRFL70R900C

Rev.A Jul.-2024

TO-220FL N 700V

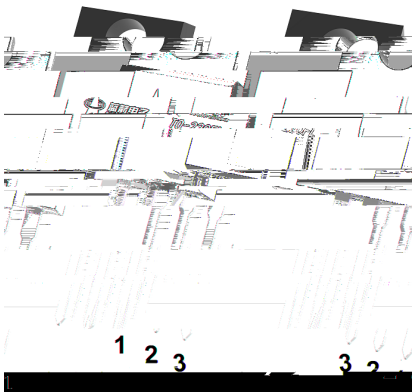
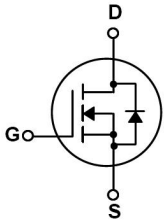
N-CHANNEL 700V Super-Junction Power MOSFET in a TO-220FL Plastic Package.

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

RoHS

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

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



PIN1 G

PIN 2 D

PIN 3 S

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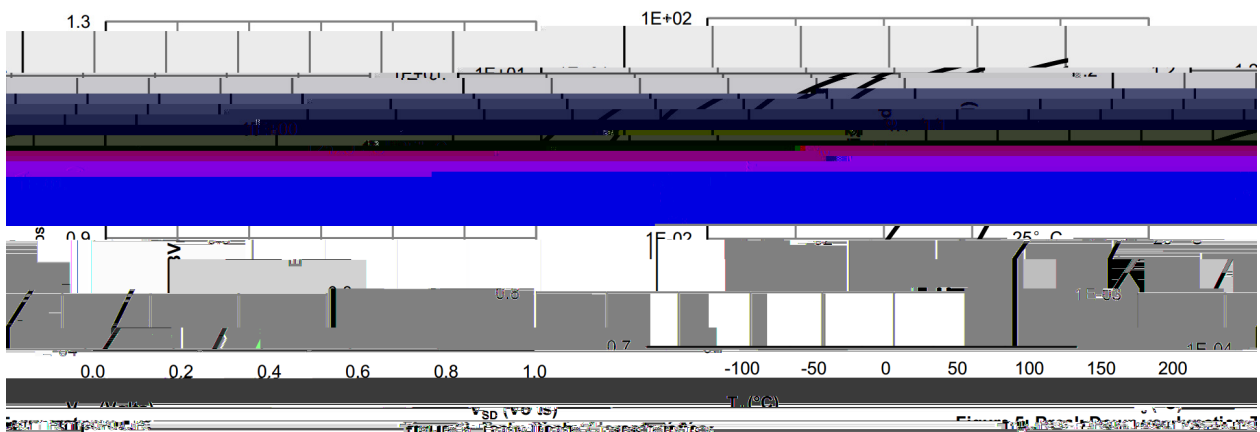
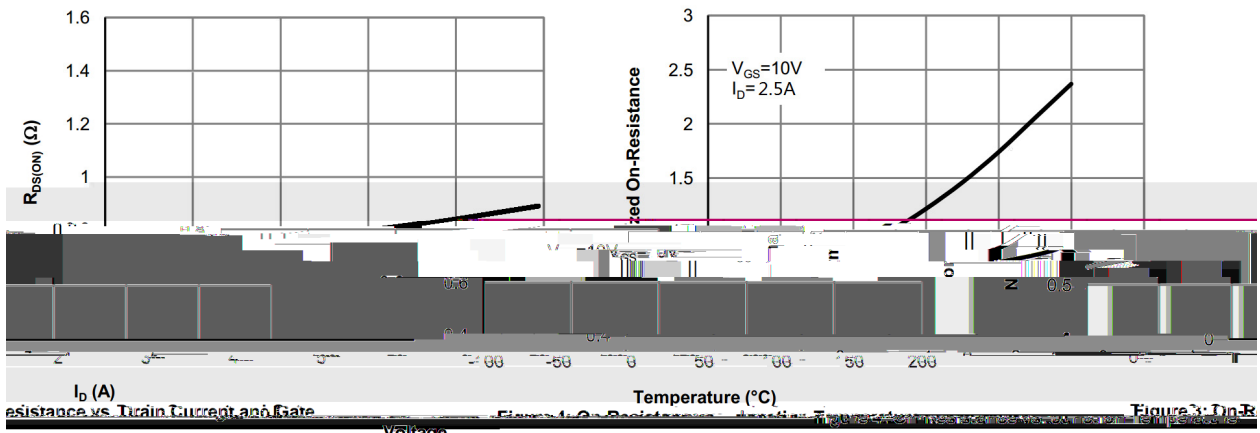
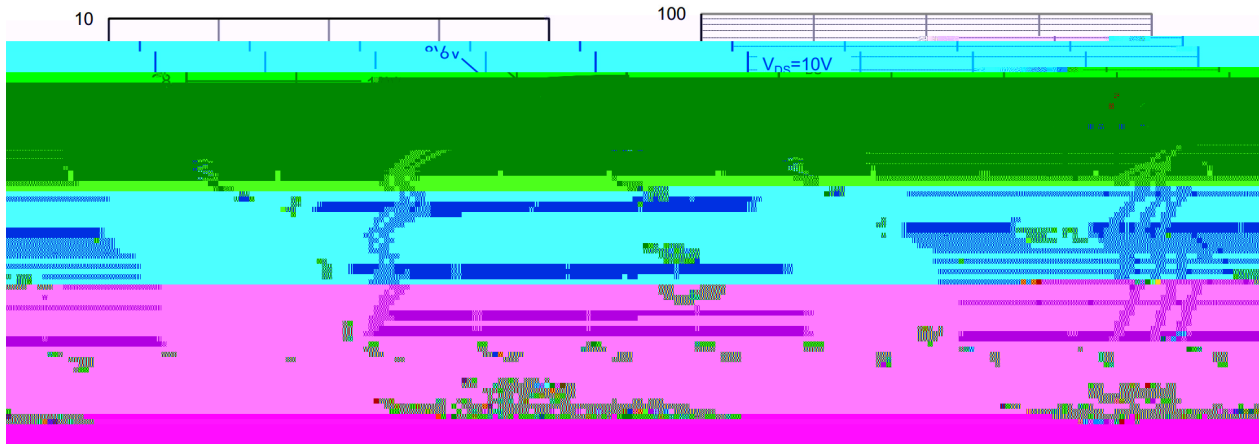
DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	700	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	3.6	A
Drain Current - Pulsed	I_{DM}	14.5	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	23.7	mJ
Avalanche Current	I_{AS}	2.1	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	30	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	
Junction-to-Case	R_{JC}	4.2	$^{\circ}\text{C}/\text{W}$
Junction-to-Ambient	R_{JA}	80	$^{\circ}\text{C}/\text{W}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	700	750		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=700V$ $V_{GS}=0V$				

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous Diode Forward Current	I_S				5.5	A
Total Gate Charge	Q_g	$V_{DS}=560V$ $I_D=5.0A$ $V_{GS}=10V$		13		nC

/ Electrical Characteristic Curve



/ Electrical Characteristic Curve

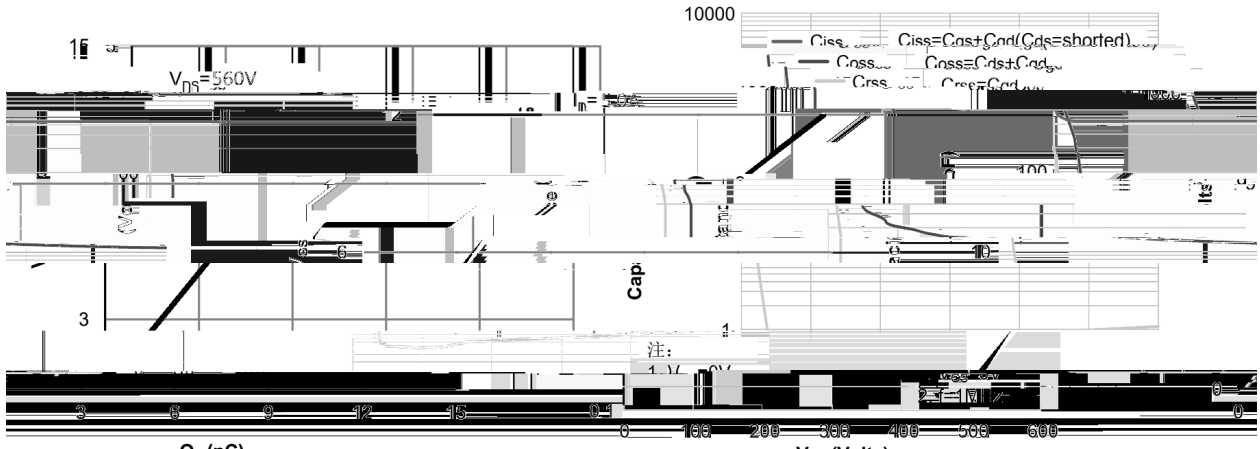
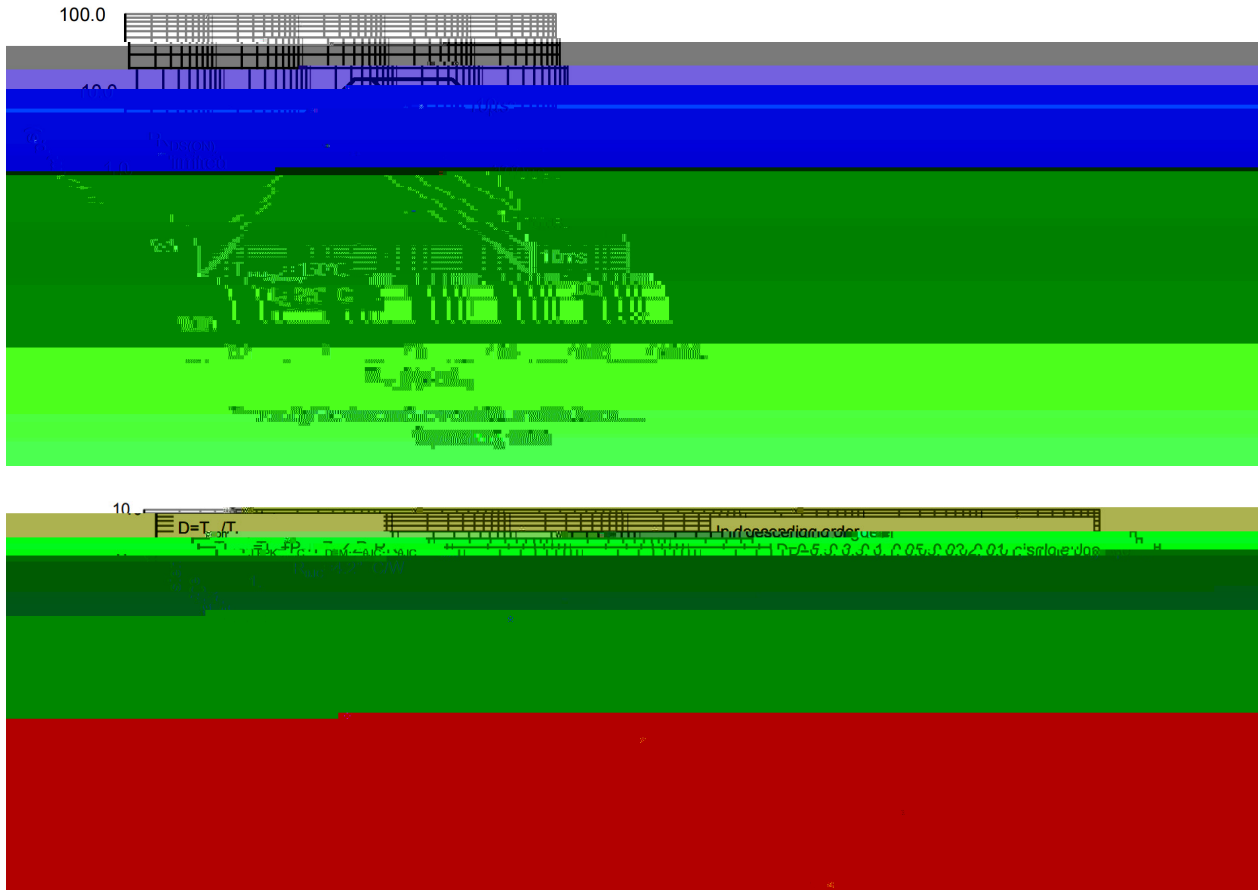


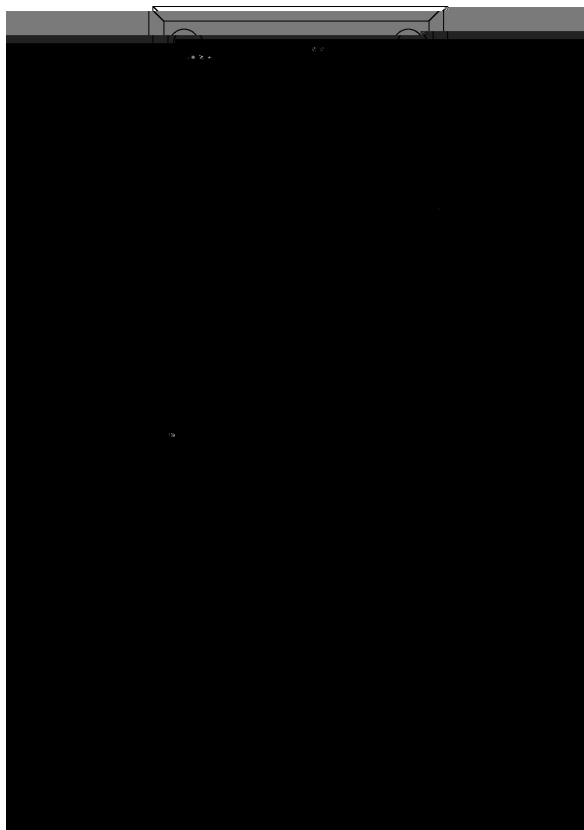
Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics



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/ Marking Instructions



BR

70R900C

Note:

BR: Company Code

70R900C: Product Type Code

****: Lot No. Code, code change with Lot No

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