BRCS450N15SHZC

Rev.A Aug.-2025

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

"Yت / Descriptions

PDFN5Ö6 Ṃ Ł N ڜ ʃ ѽ Ẓ ٦

N-Channel MOSFET in a PDFN5×6 Plastic Package.

◕ È / Features

V_{DS}(V)=150V I_D=21A

$R_{DS(ON)}$@10V≤45mΩ(Typ.40mΩ)

$R_{DS(ON)}$@6V≤55mΩ(Typ.45mΩ)

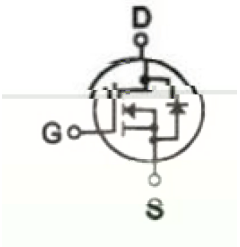
ṇ ғ β HF Product.

४ ڍ / Applications

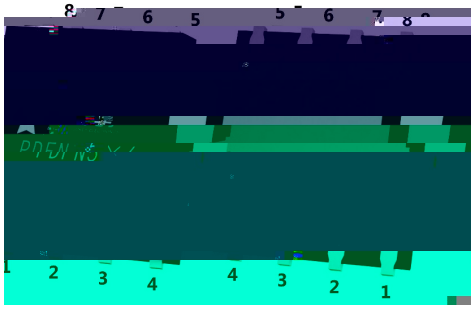
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LCD TV appliances, High power inverter system, LCDM appliances.

Л ف̃ ᾇ ≠ ɛ / Equivalent Circuit



ã ﾒ ὺ̃ / Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

ł. ʜ ב / Marking

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See Marking Instructions.

v ̈Ω Parameter	ϒ N Symbol		
Drain-Source Voltage	V_{DS}		
Continuous Drain Current	$I_D(T_c=25\ \ )$		
	$I_D(T_c=100\ \ )$	13.8	
Pulsed Drain Current*	I_{DM}	84	
Gate-Source Voltage	V_{GS}	± 20	
Power Dissipation	$P_D(T_c=25\ \ )$	50	W
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 150	ł
Continuous-Source Current	I_S	21	A
Maximum Junction-to-Ambient**	$R_{\theta JA}$	50	/ W
Maximum Junction-to-Case**	$R_{\theta JC}$	2.5	

Notes

* Pulse width ≤ 300 μs, duty cycle ≤ 2 %

** Mounted on Large Heat Sink

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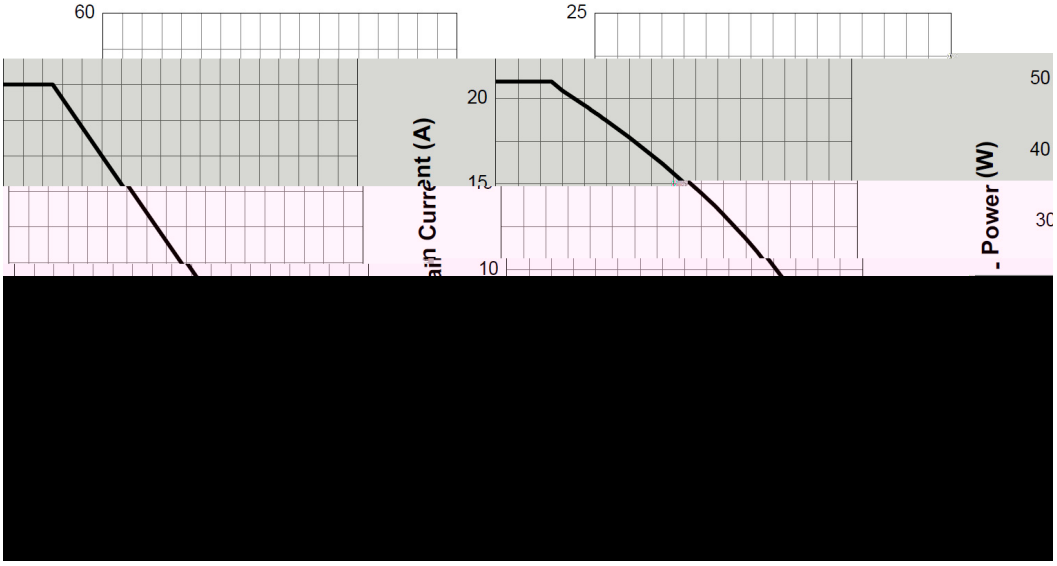
Symbol

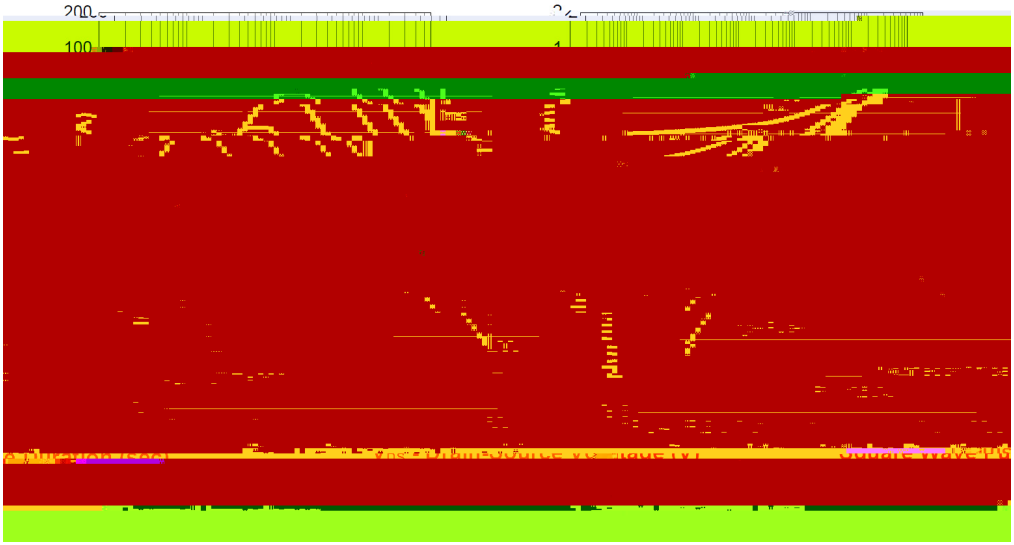
Min

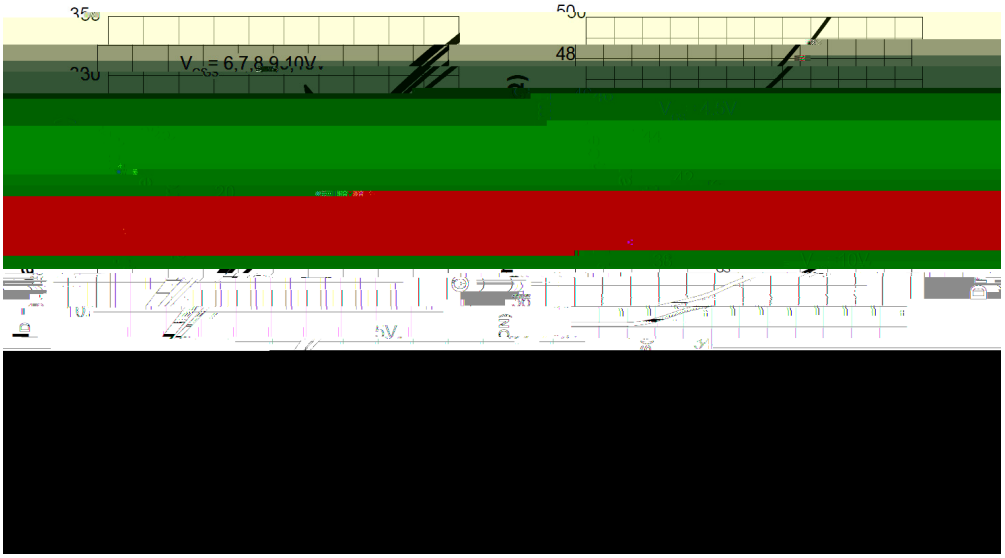
≠ ∧ Ǝ Ạ / Electrical Characteristics(Ta=25 ⅃)

v ̈Ω Parameter	ϒ N Symbol	⅄ ⁝ ↾ Ţ Test Conditions	ѡ ṇ Ө Min	Ɛ ʒ Ө Typ	ѡ ᶻ Ө Max	ᴅ Ꮒ Unit
Total Gate Charge	Q_g	V_{GS}=10V V_{DS}=75V I_D=10A		25.8		nC
Gate Source Charge	Q_{gs}			8		
Gate Drain Charge	Q_{gd}			8.3		
Turn-On Delay Time	$t_{d(on)}$	V_{GEN}=10V V_{DS}=75V I_{DS}=10A R_G=4.5Ω R_L=7.5Ω		11		ns
Turn-On Rise Time	t_r			40		
Turn-Off Delay Time	$t_{d(off)}$			19		
Turn-Off Fall Time	t_f			32		

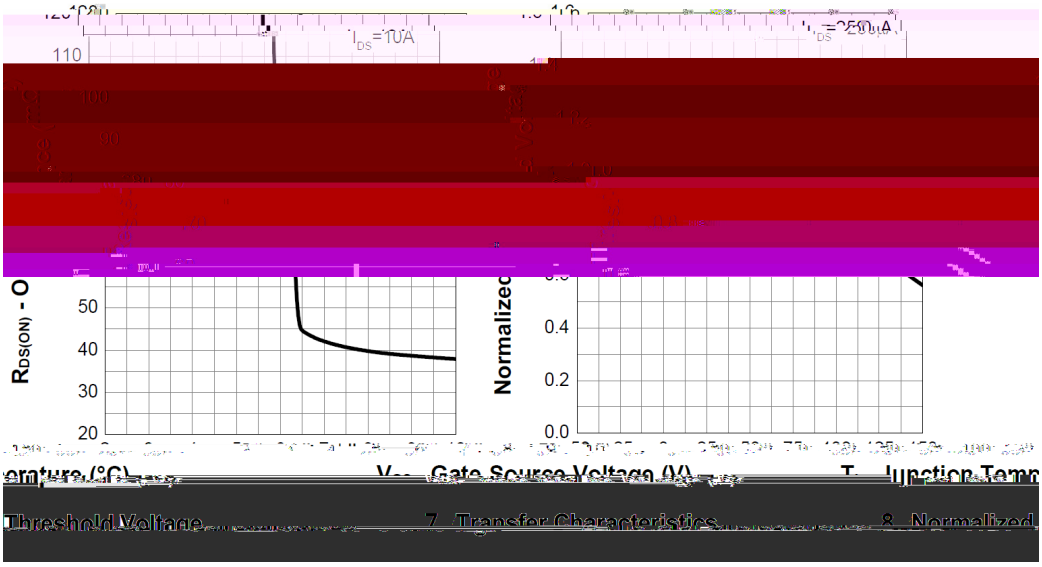
≠ ∃ ÃΈ ∀ ƒ / Electrical Characteristic Curve

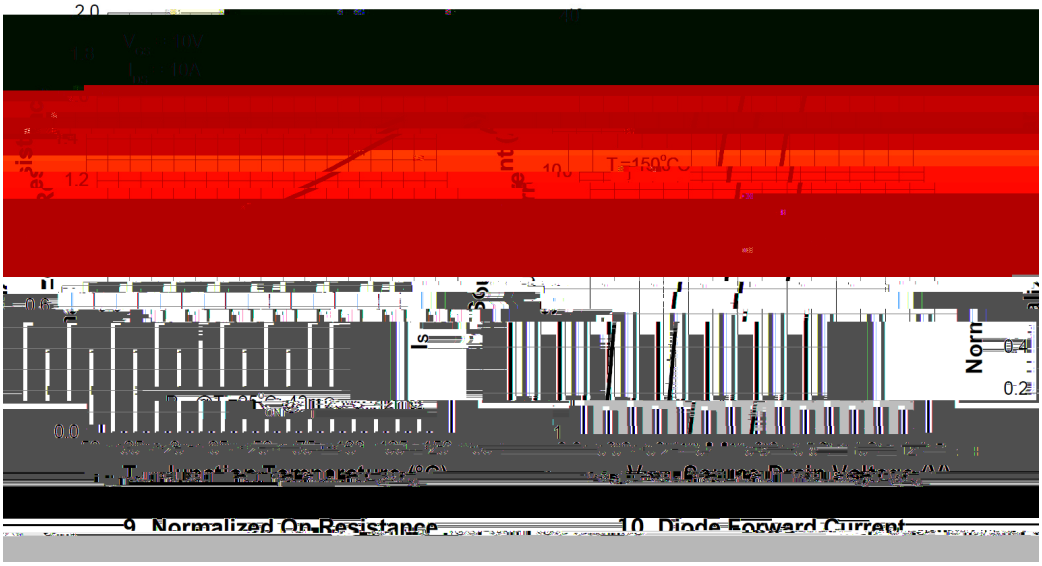


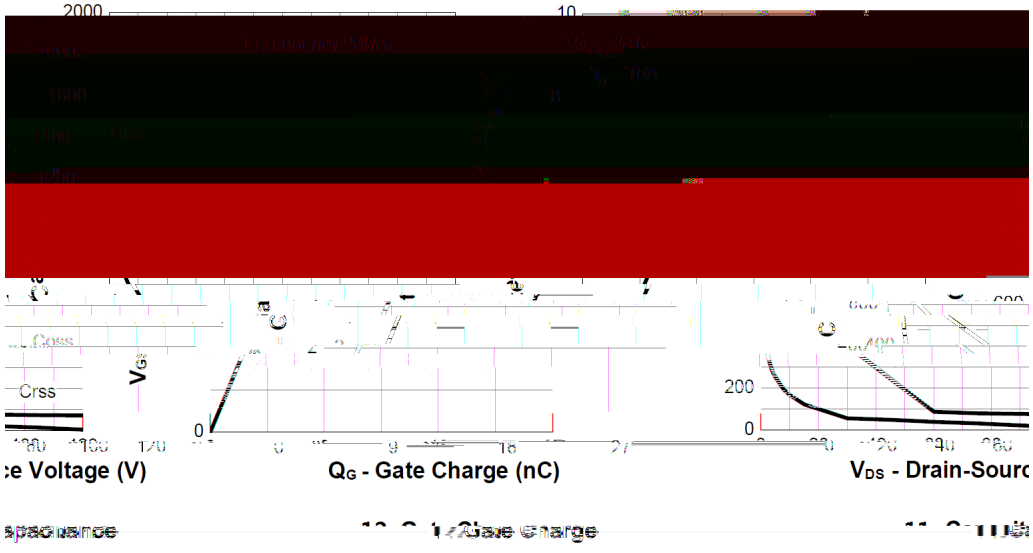




≠ ∃ Ã´E ∀ ƒ / Electrical Characteristic Curve







ł. Ļ̈Ω / Marking Instructions



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Note:

BR:	Company Code
450N15SH:	Product Type Code
****:	Lot No. Code, code change with Lot No.

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