BRCS450N15SHZC

Rev.A Aug.-2025

DATA SHEET

˝Yت / Descriptions

PDFN5Ö6 Ṃ Ŀ N ˇ ʃ ᾧ Ẕ ˥

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 ɾ β HF Product.

ɤ ɛ / Applications

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

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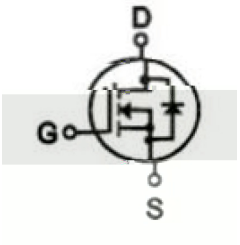
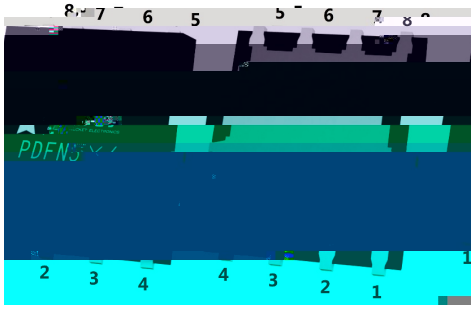


ã ˩ ʊ˜ / Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

ŁȚ ʜ ɔ̀ / 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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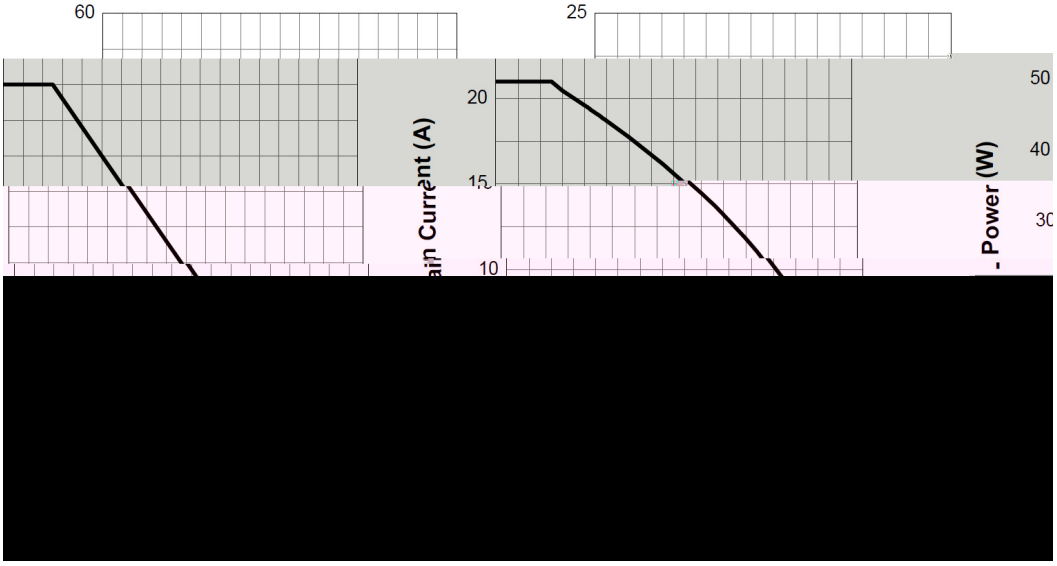
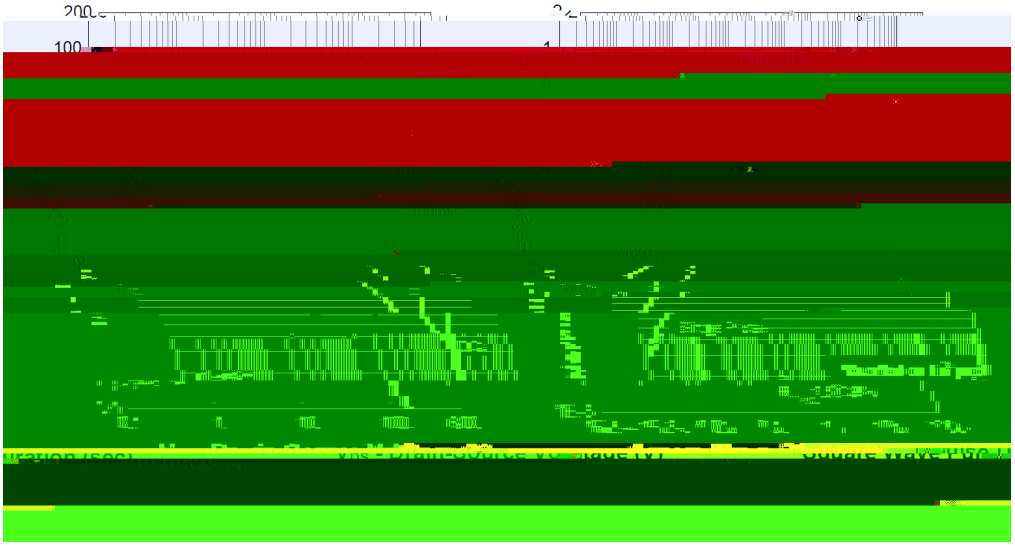
Symbol Min

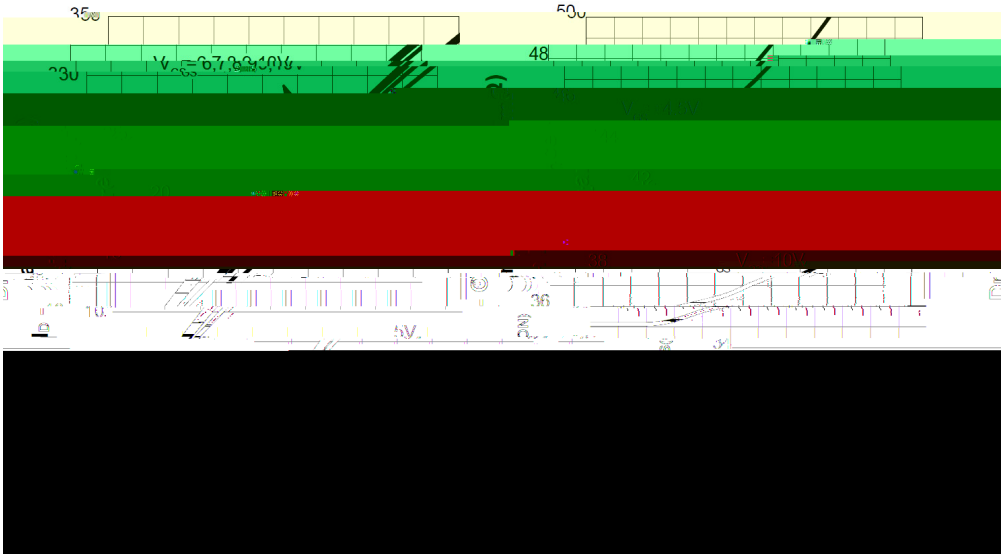
⸗ ⸝ ⸢ ⸣ / Electrical Characteristics(Ta=25 ⸥)

⸝ ⸢ Parameter	⸜ ⸝ Symbol	⸥ ⸢ ⸣ ⸢ Test Conditions	⸢ ⸣ ⸢ Min	⸢ ⸣ ⸢ Typ	⸢ ⸣ ⸢ Max	⸣ ⸢ 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		

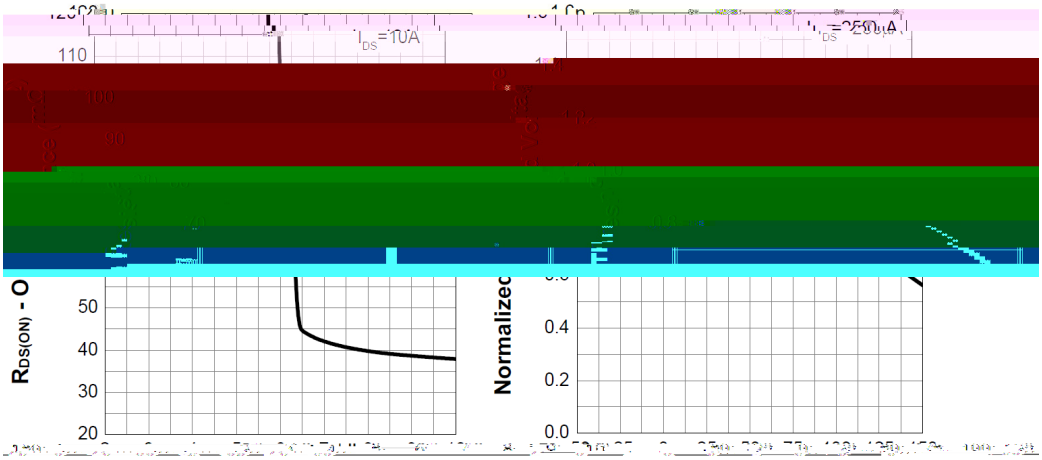
ƒ / Electrical Characteristic Curve



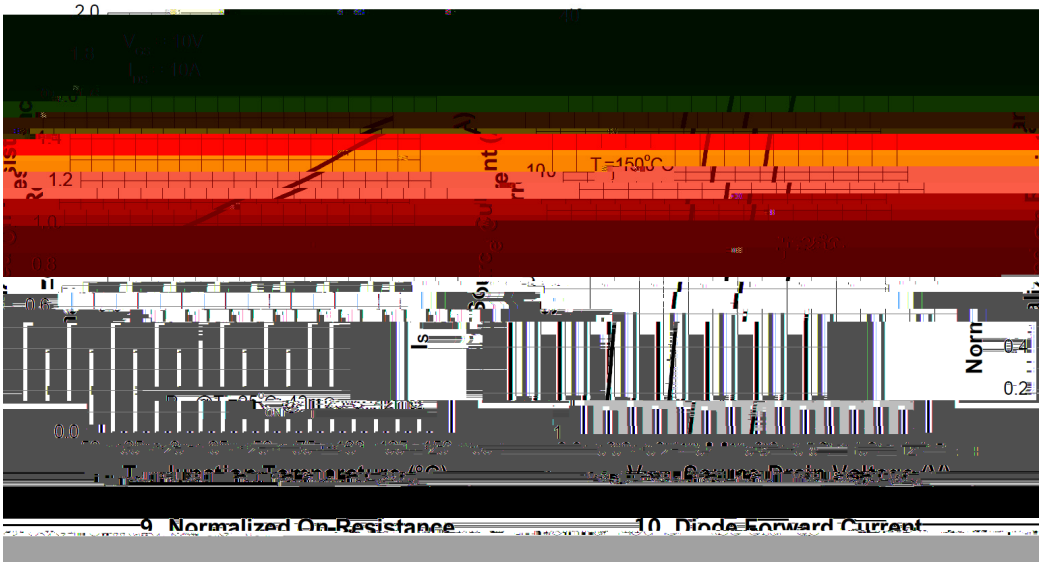




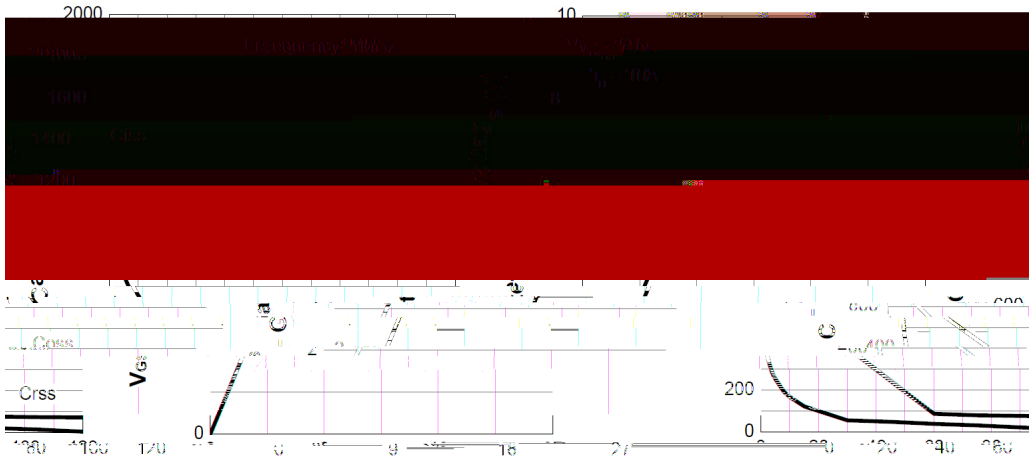
⁝ ƎĄ´E ⅵ ƒ / Electrical Characteristic Curve



8. Normalized Threshold Voltage
7. Transfer Characteristics



9. Normalized On-Resistance
10. Diode Forward Current



ce Voltage (V)
Q_G - Gate Charge (nC)
V_{DS} - Drain-Sourc

Capacitance
Gate Charge

Ł. ĽŐ / 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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