

描述 / Descriptions

PDFN506 M 1 N 5 6 Z 1

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

特点 / Features

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

$R_{DS(ON)}@10V \leq 45m\Omega$ (Typ.40m Ω)

$R_{DS(ON)}@6V \leq 55m\Omega$ (Typ.45m Ω)

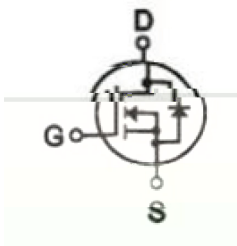
f_{β} HF Product.

应用 / Applications

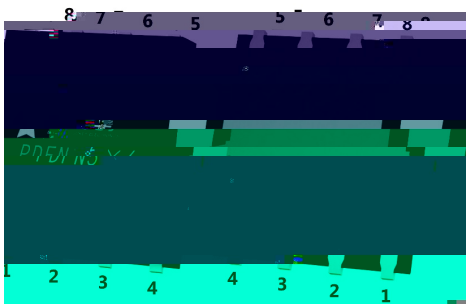
液晶电视驱动, 大功率逆变器系统, LCDM 家电。

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

等效电路 / Equivalent Circuit



引脚 / Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

标记 / Marking

见“标记”

See Marking Instructions.

BRCS450N15SHZC

Rev.A Aug.-2025

Parameter	Symbol		
Drain-Source Voltage	V_{DS}		
Continuous Drain Current	$I_D(T_c=25^\circ\text{C})$		
	$I_D(T_c=100^\circ\text{C})$	13.8	
Pulsed Drain Current*	I_{DM}	84	
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	50	W
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 150	$^\circ\text{C}$
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 $\leq 300\ \mu\text{s}$, duty cycle $\leq 2\%$

** Mounted on Large Heat Sink

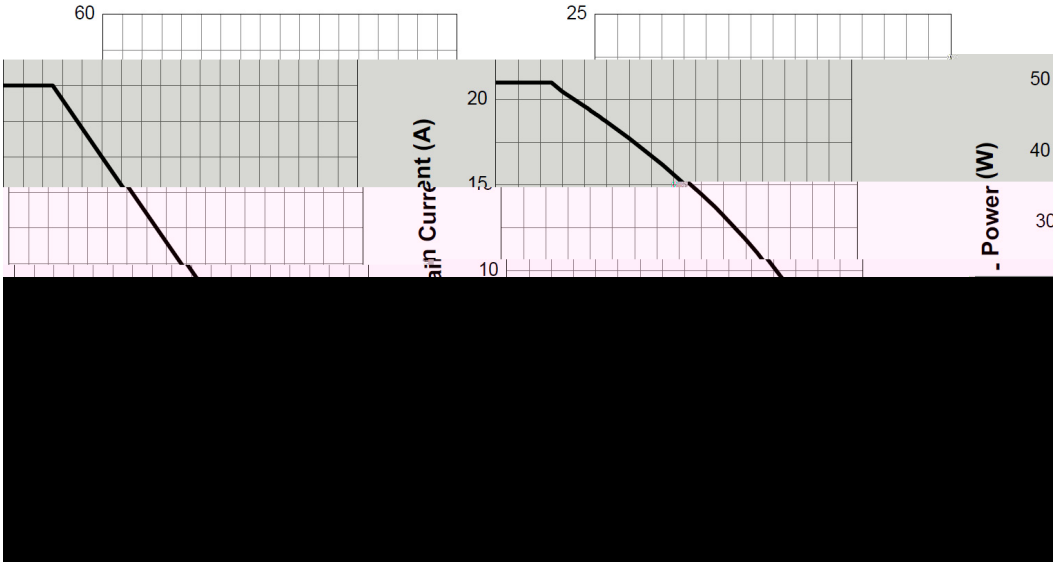
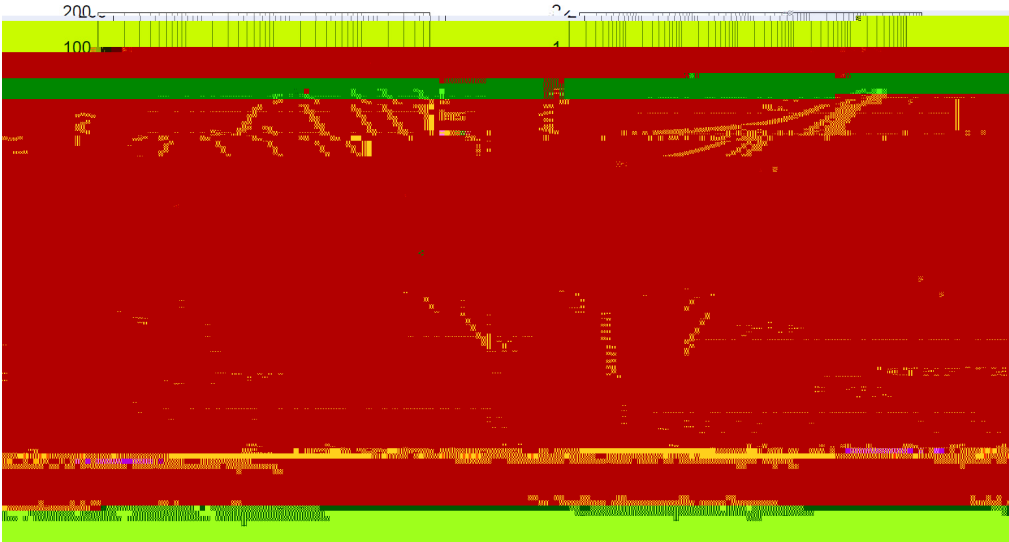
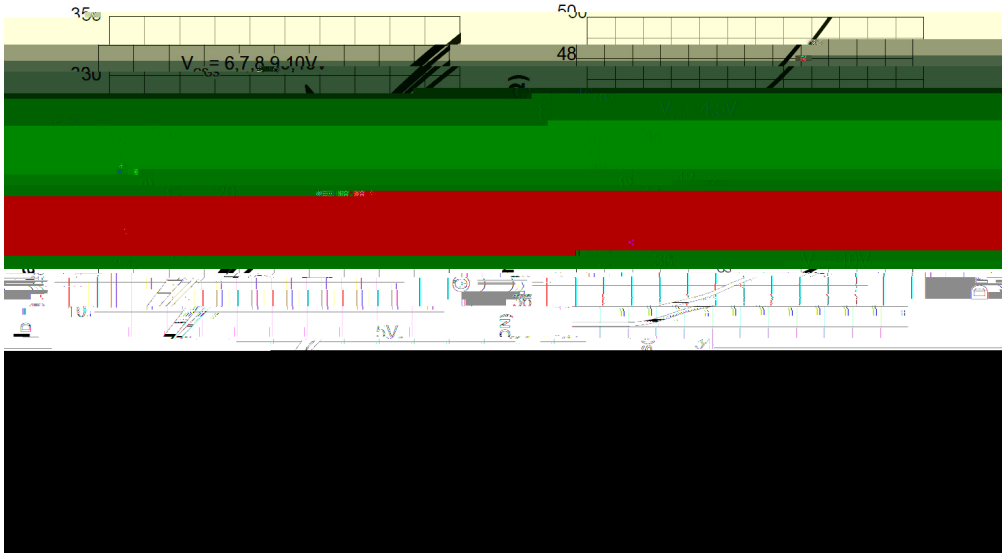
Symbol

Min

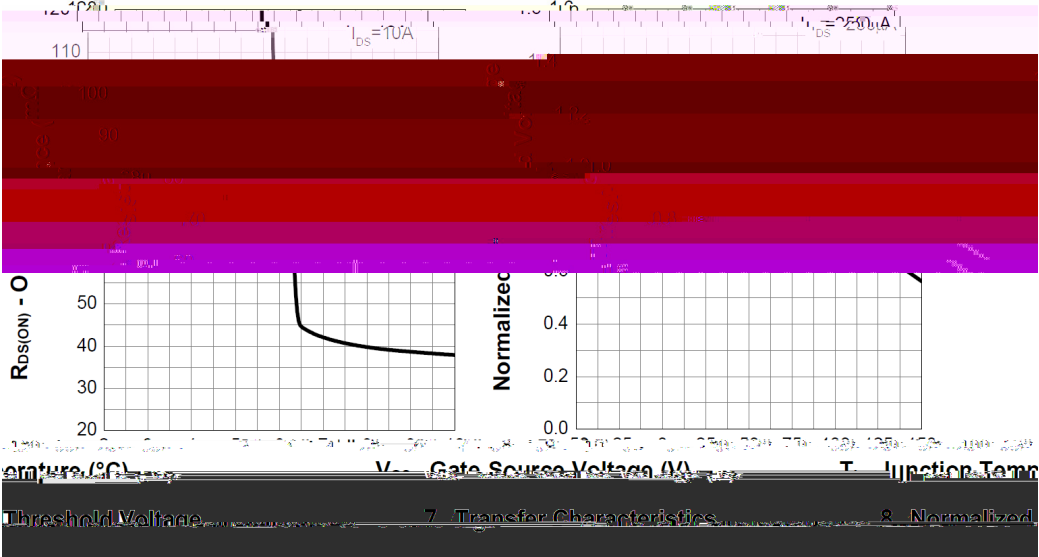
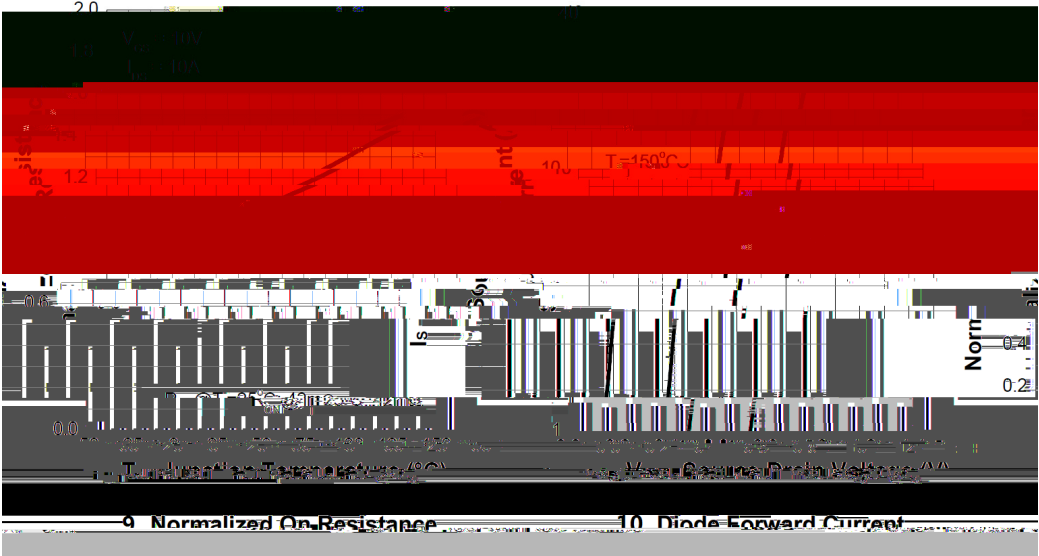
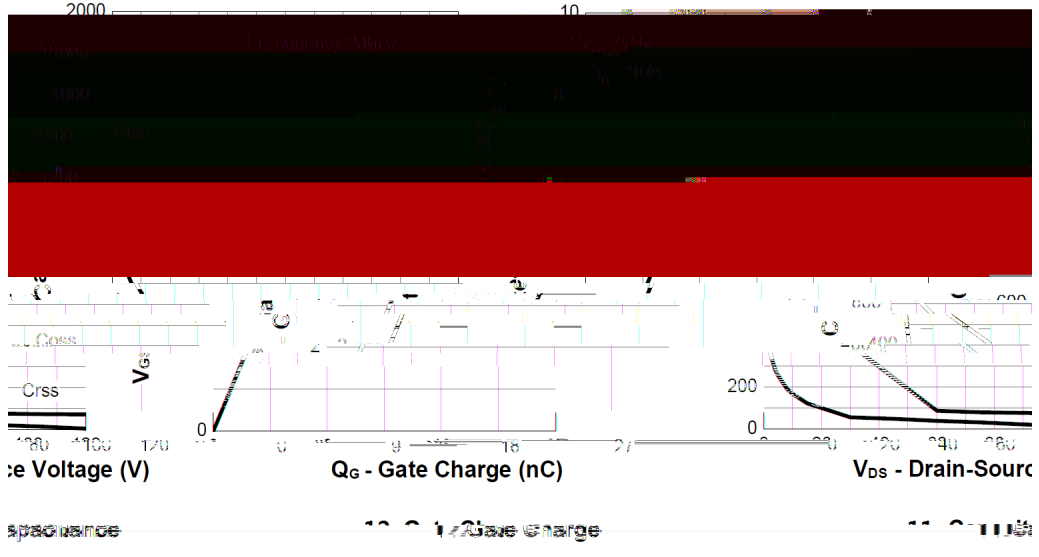
Electrical Characteristics(Ta=25 ℃)

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		

Electrical Characteristic Curve



Electrical Characteristic Curve



1. 1.1 / Marking Instructions



- 1.1.1 标记说明
- EU 1

公司代码
- 450N15SH 1

产品代码
- 1

批次代码，代码随批次变化
- Note:
- BR:

Company Code
- 450N15SH:

Product Type Code
- ****:

Lot No. Code, code change with Lot No.

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