5 é / Descriptions

PDFN5 ˜6A .> / / x E N ?ú 3 « | • ’ ož
Dual N-CHANNEL MOSFET in a PDFN5 h 6A Plastic Package.

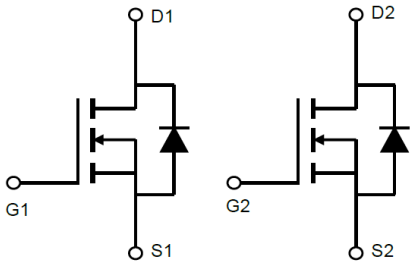
¤ ª / Features

Dual N-Ch
VDS(V)=60V
ID=24.5A
RDS(ON)<13m (VGS=10V)
RDS(ON)<18m (VGS=4.5V)
—)í D }ož HF Product.

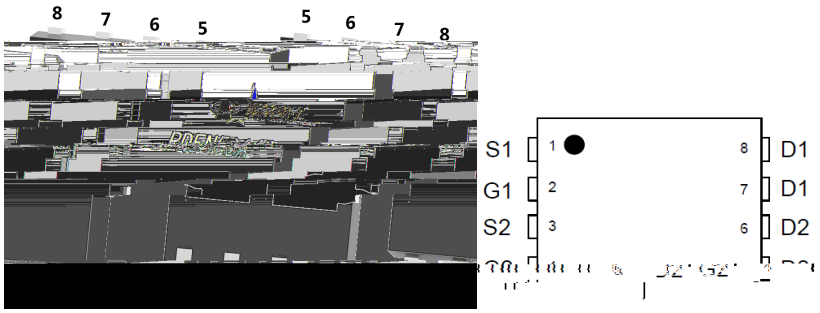
Ð ÷ / Applications

PWM • o• ¿ ú • ¼o• › ’ òo• LED ² °ož
PWM Application, Load Switch, Power Management, Dimming LED.

Ã W] Ô · / Equivalent Circuit



• Û - æ / Pinning



, M V / Marking

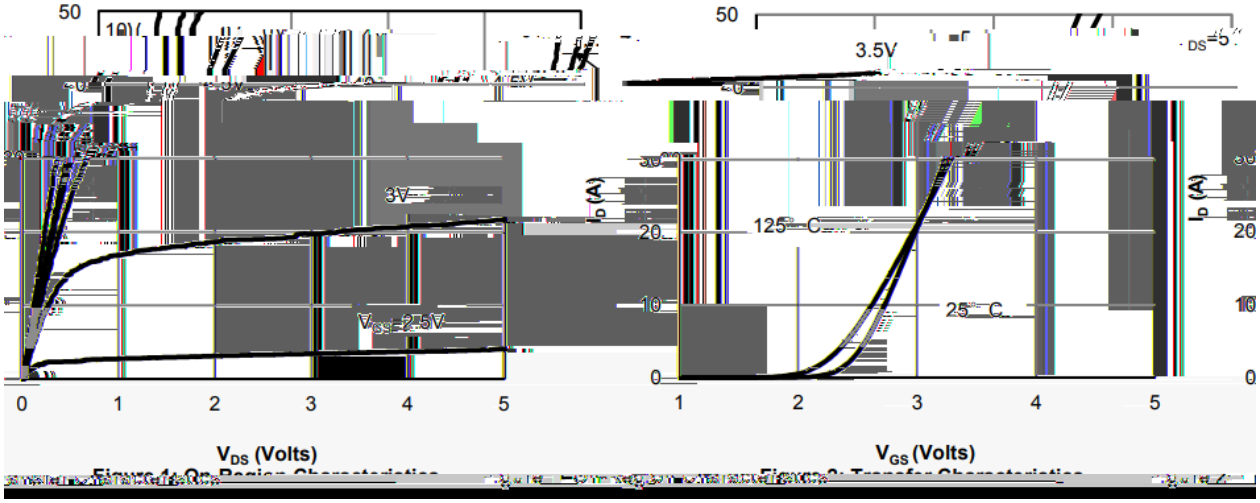
• - ~ ª ¢ ÄSee Marking Instructions.

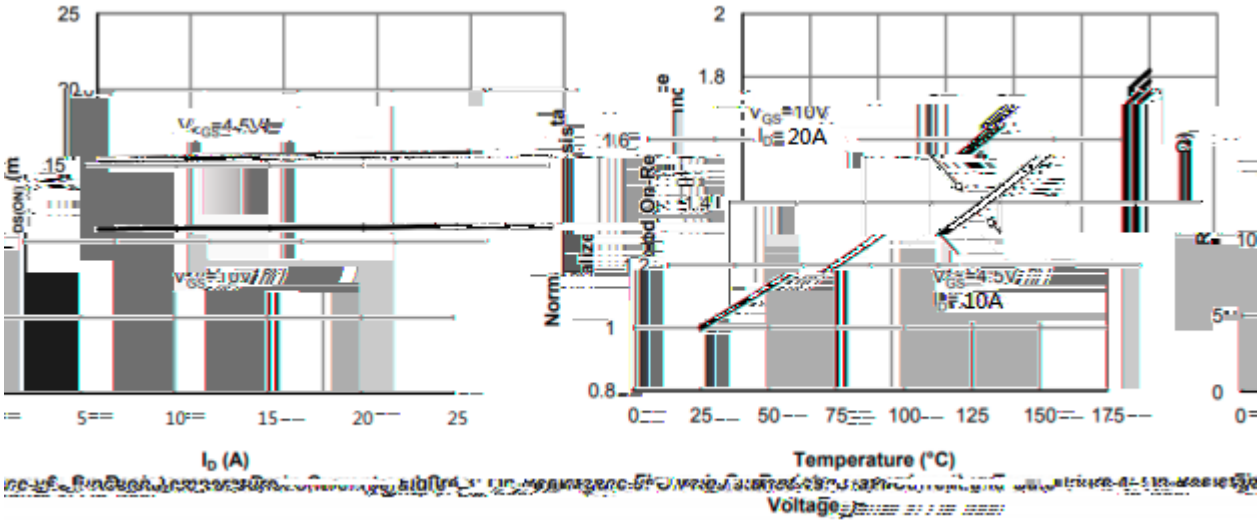
@ ƒ Parameter	… Z Symbol	ƒ › Rating	% y Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain Current	I_D(Tc=25)	24.5	A
Drain Current - Pulsed	I_{DM}	95	A
Gate-Source Voltage	V_{GSS}	±20	V
Single Pulsed Avalanche Energy	E_{AS}	70	mJ
Avalanche Current	I_{AS}	20	A
Power Dissipation	P_D(Tc=25)	12.5	W
Operating and Storage Temperature Range	T_J,T_{stg}	-55 to 150	
Junction-to-Ambient t 0 10	R JA	35	/W

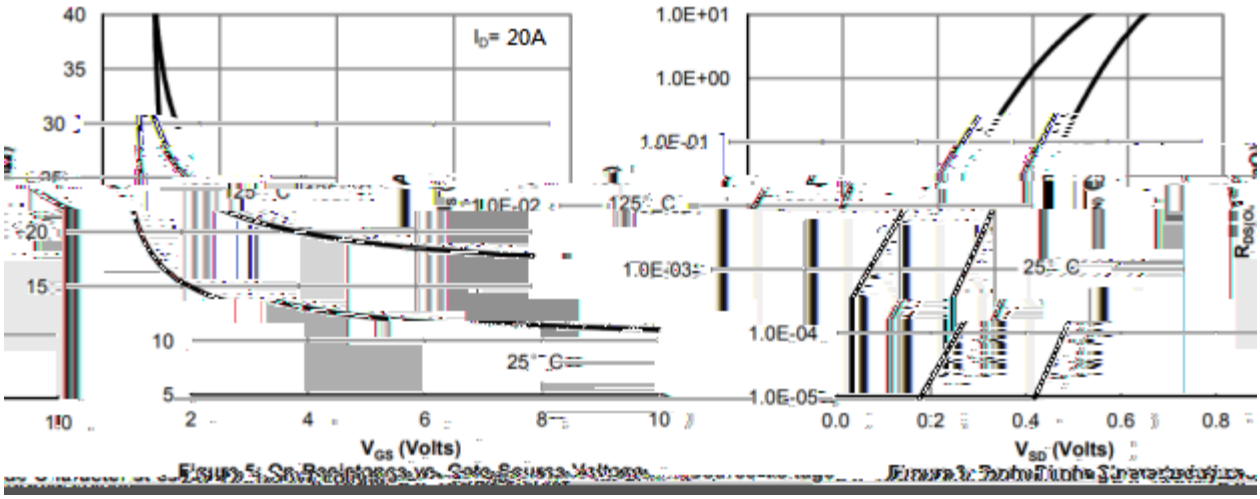
3

@ *f* Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=30V R_L=2.3 R_{GEN}=3		5		ns
Turn-On Rise Time	t_r			3		
Turn-Off Delay Time	$t_{d(off)}$			19		
Turn-Off Fall Time	t_f			3		

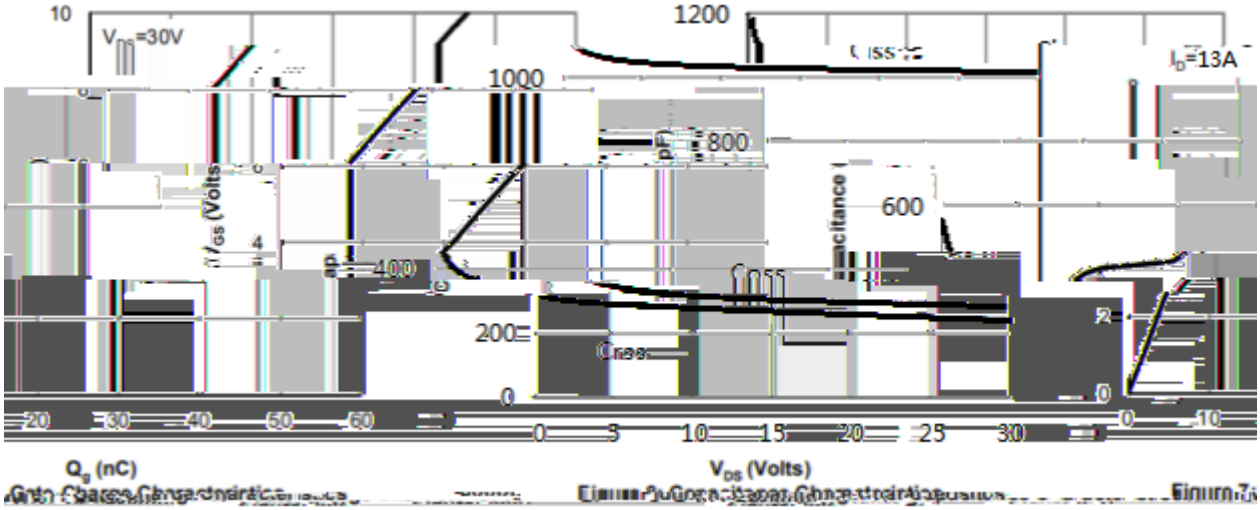
Ô ? d • Ž ¢ / Electrical Characteristic Curve

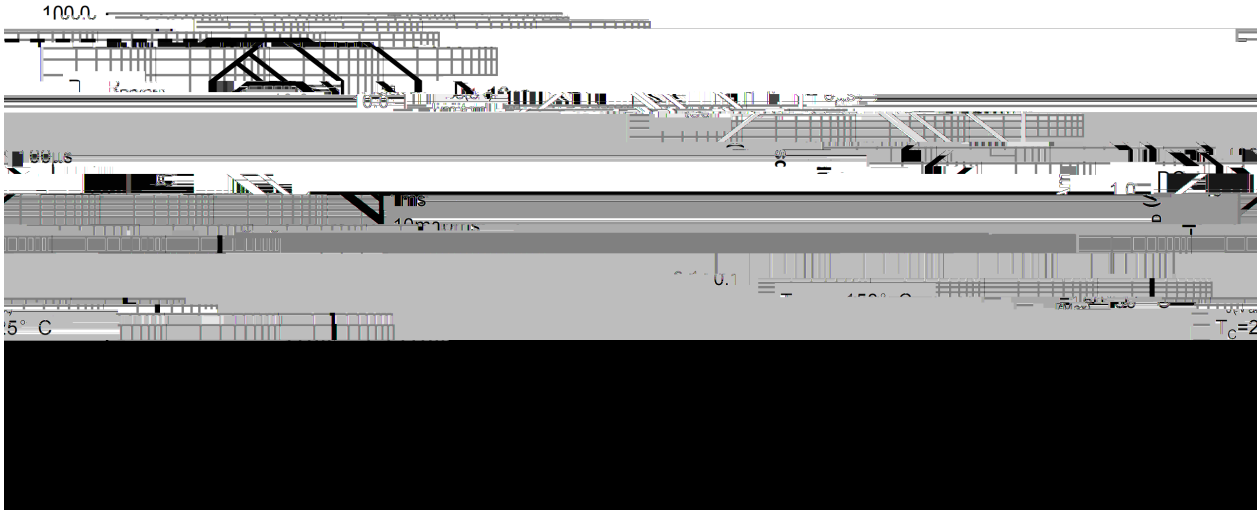


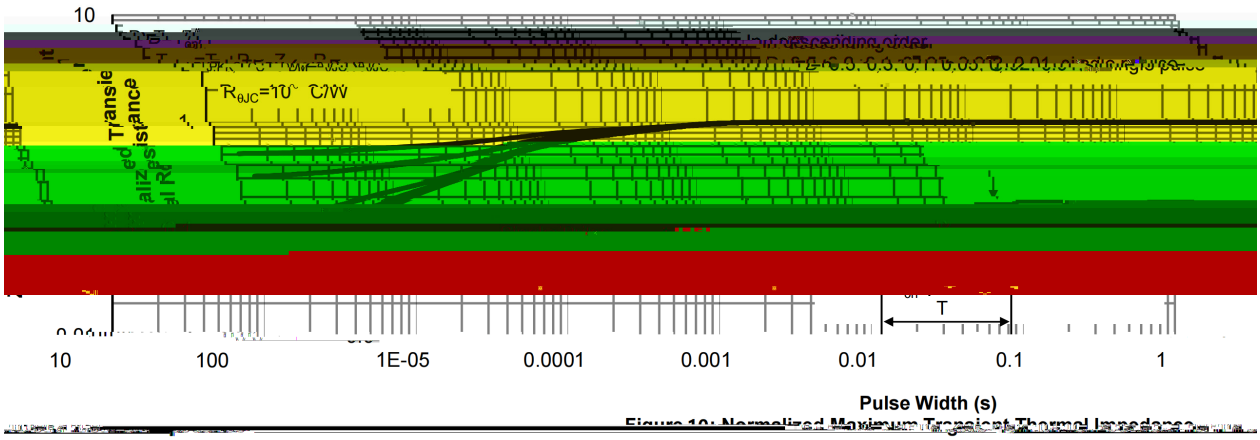




Ô ? d • Ž ¢ / Electrical Characteristic Curve

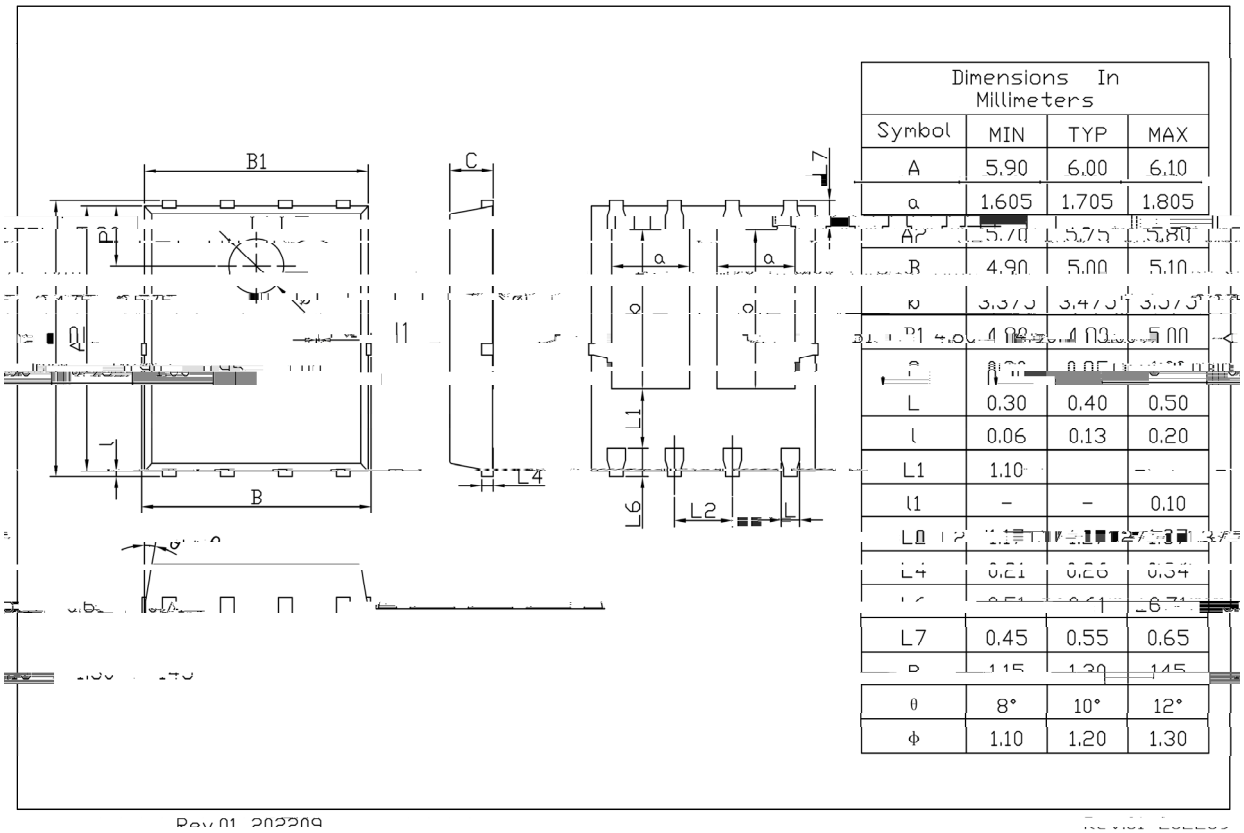






Ø ¤ =) ¢ / Package Dimensions

PDFN5X6A Unit:mm



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
a	1.605	1.705	1.805
A2	5.70	5.75	5.80
B	4.90	5.00	5.10
b	3.375	3.475	3.575
B1	4.90	4.00	5.00
c	0.20	0.25	0.30
L	0.30	0.40	0.50
l	0.06	0.13	0.20
L1	1.10		
l1	-	-	0.10
L2	0.11	0.16	0.21
L4	0.21	0.26	0.34
L6	0.51	0.61	0.71
L7	0.45	0.55	0.65
R	1.15	1.30	1.45
θ	8°	10°	12°
Φ	1.10	1.20	1.30

Rev.01 202209

, M y ƒ / Marking Instructions



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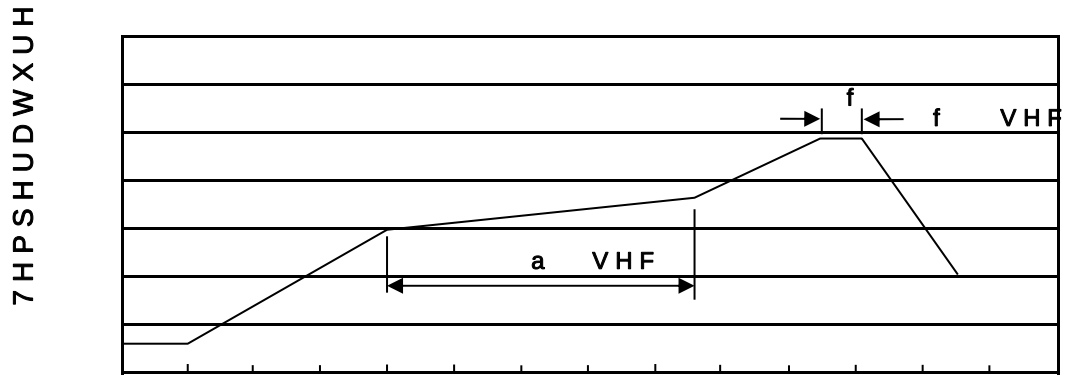
120N06S y D } º Z

y ÿ D Z W A k š ÿ D Z J

Note y

BR y	Company Code
120N06S y	Product Type
****:	Lot No. Code, code change with Lot No

š WD t … • Ž ¢ (x /) / : K S V K X G Z [X K 6 X U L O R K L U X / 8 8 K L R U] 9 U R J K X O T M 6



7LPH VHF

ª ¢ y	Note:
1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;	1.Preheating:150~180 - , Time:60~90sec.
2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;	2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
3o•D N ò i Ò 0 , † 2 ½10 - /sec.	3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 -	ž • y 10 r1 sec.	Temp.:260 r5 -	Time:10 r1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type / x ¥ ”	Units ;>û ¦H					Dimension ;>û p . (unit Æmm³)		
	Units/Reel Q 2 &	Reels/Inner Box 2 & "	Units/Inner Box Q "	Inner Boxes/Outer Box " ”	Units/Outer Box Q ”	Reel	Inner Box"	Outer Box"
PDFN5×6A	5000	2	10000	6	60000	13”×12	360×360×50	380×335×366

„ Ð y ƒ / Notices