/ Descriptions

DFN8×8-4L N

Dual N-CHANNEL MOSFET in a DFN8×8-4L Plastic Package.

/ Features

V_{DS}(V)=200V I_D=9A

$R_{DS(ON)}$@10V<0.45Ω(Typ. 0.4Ω)

$R_{DS(ON)}$@6V<0.6Ω(Typ. 0.5Ω)

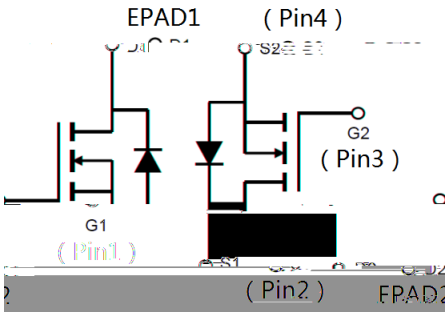
HF Product.

/ Applications

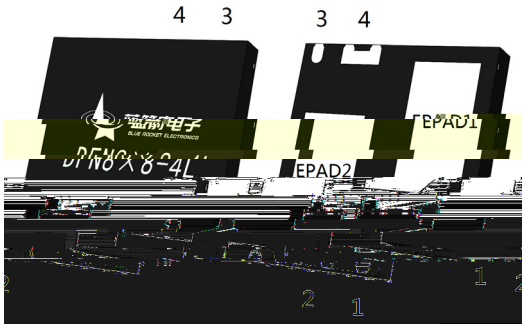
LED

Used in high-frequency switching power supply, electronic ballast, LED power supply and high-speed air duct.

/ Equivalent Circuit



/ Pinning



PIN 1	G1	PIN 2	S1	EPAD1	D1
PIN 3	G2	PIN 4	S2	EPAD2	D2

/ Marking

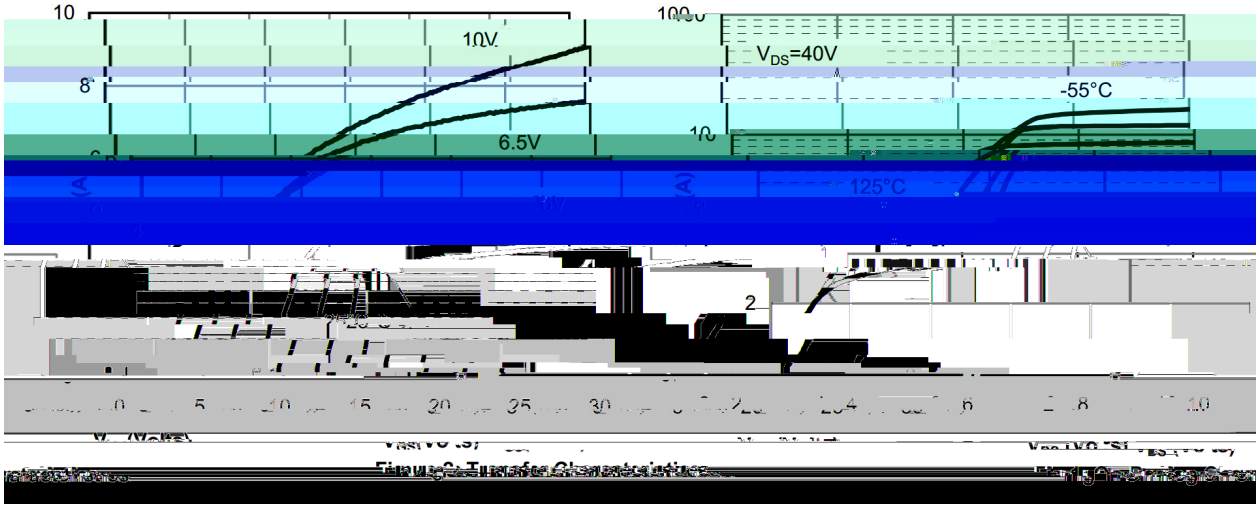
See Marking Instructions.

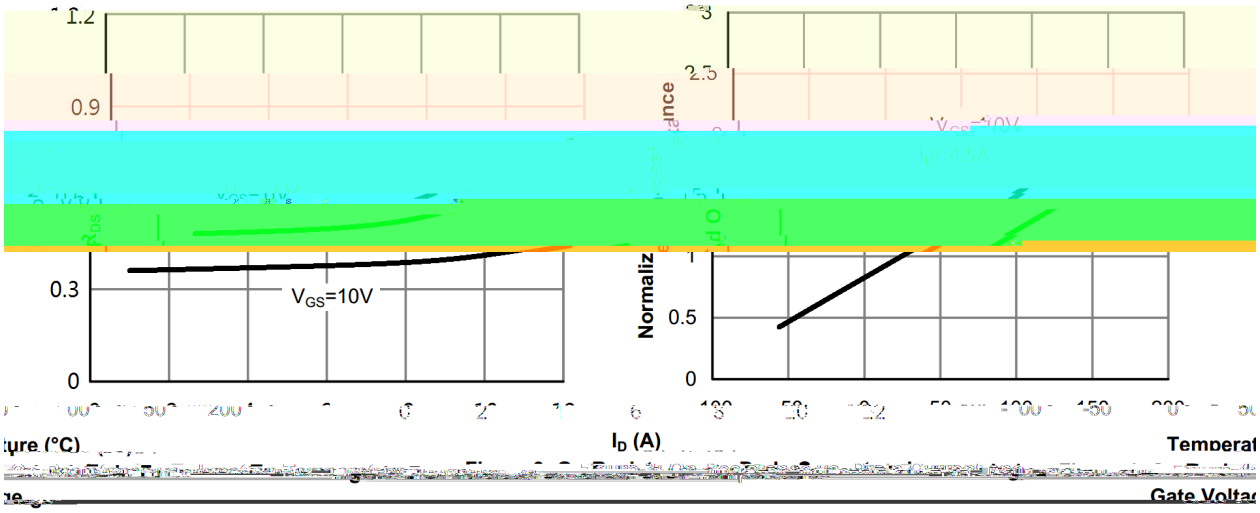
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	200	V
Drain Current	I_D(Tc=25)	9	A
Drain Current - Pulsed	I_{DM}	28.6	A
Gate-Source Voltage	V_{GSS}	±20	V
Avalanche Current	I_{AR}	5	A
Single Pulsed Avalanche Energy	E_{AS}	166	mJ
Power Dissipation (T_C=25)	P_D	70	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	
Thermal resistance,Junction to Case	$R_{\theta JC}$	1.79	/ W

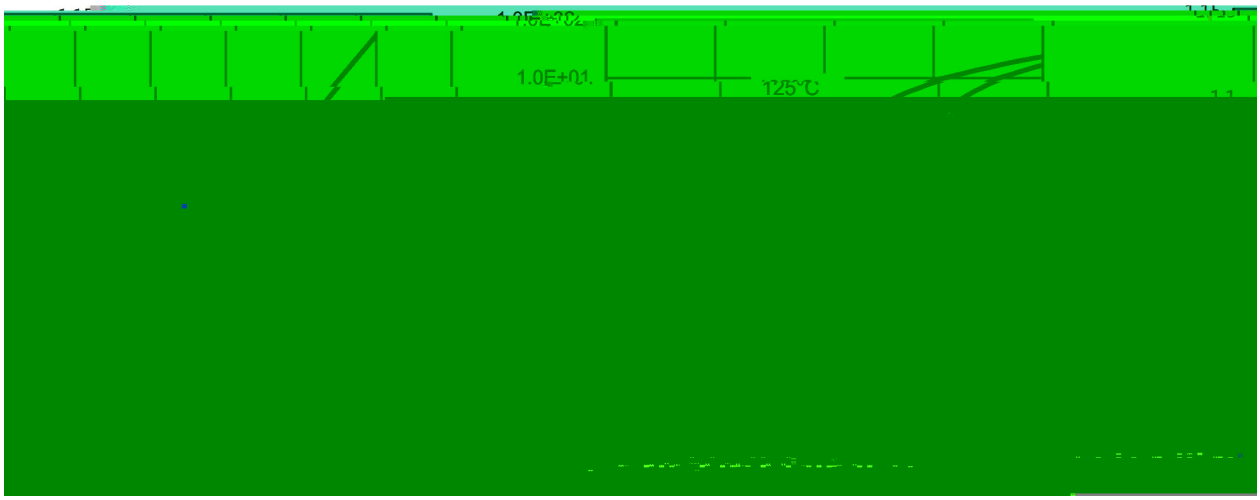
Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=250μA	200	230		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=200V	V_{GS}=0V			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V	V_{DS}=0V			±0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=250μA	2	3	4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V	I_D=4.5A		0.4	0.45	Ω
	$R_{DS(on)}$	V_{GS}=6V	I_D=2.5A		0.5	0.6	Ω
Input Capacitance	C_{iss}	V_{DS}=25V f=1.0MHz	V_{GS}=0V		630		pF
Output Capacitance	C_{oss}				270		pF
Reverse Transfer Capacitance	C_{rss}				50		pF
Total Gate Charge	Q_G						

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{DS}=100V I_D=9.0A R_G=25Ω		15		ns
Turn-On Rise Time	t_r			33		
Turn-Off Delay Time	$t_{d(off)}$			40		
Turn-Off Fall Time	t_f			30		
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS} = 0 V, I_S = 9.0A			1.4	V
Reverse Recovery Time	t_{rr}	V_{GS} = 0V, I_S = 9.0A, dI_F/dt = 100 A/μG S				

/ Electrical Characteristic Curve

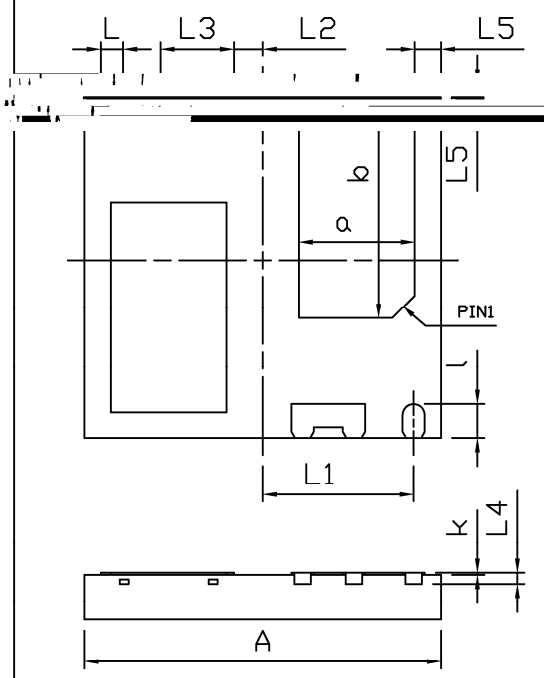






/ Package Dimensions

DFN8X8-4L Unit:mm



Dimensions In			
A	7.90	8.00	8.10
B	7.90	8.00	8.10
C	0.95	1.00	1.10
L	0.45	0.50	0.55
L1	–	3.385	–
L2	–	0.645	–
L3	1.55	1.65	1.75
L4	0.153	0.203	0.253
L5	–	0.59	–
a	2.50	2.60	2.70
b	4.61	4.71	4.81
K	0.00	–	0.05
l	0.675	0.775	0.875