

/ Descriptions

DFN8×8-4L N

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

/ Features

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

$R_{DS(ON)}@10V<0.45\Omega$ (Typ. 0.4 Ω)

$R_{DS(ON)}@6V<0.6\Omega$ (Typ. 0.5 Ω)

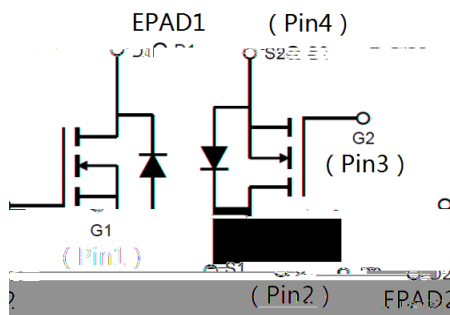
HF Product.

/ Applications

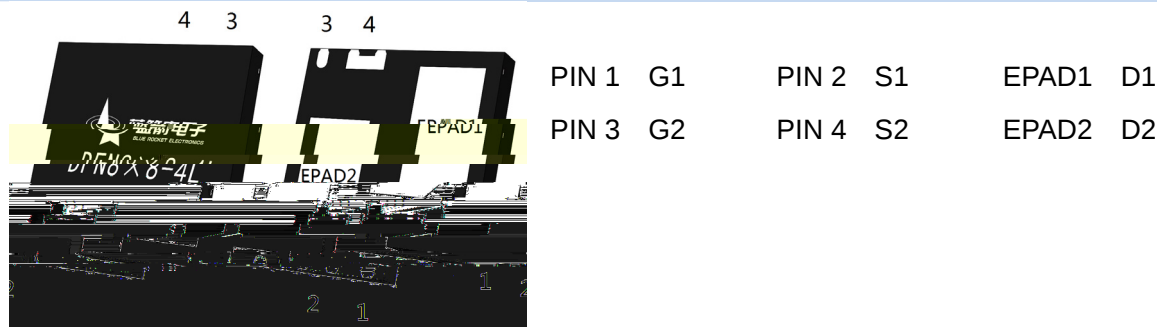
LED

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

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.



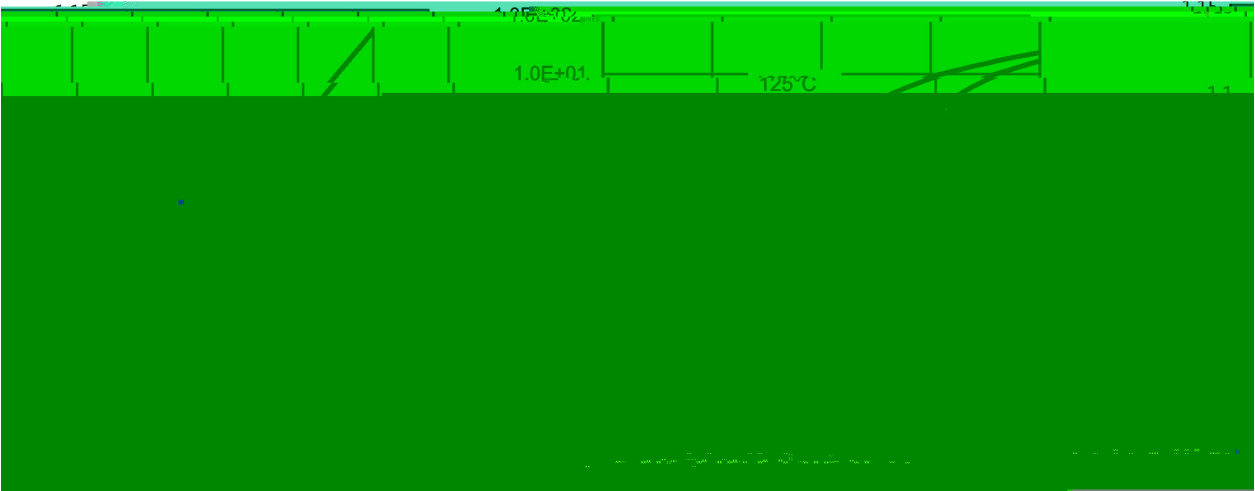
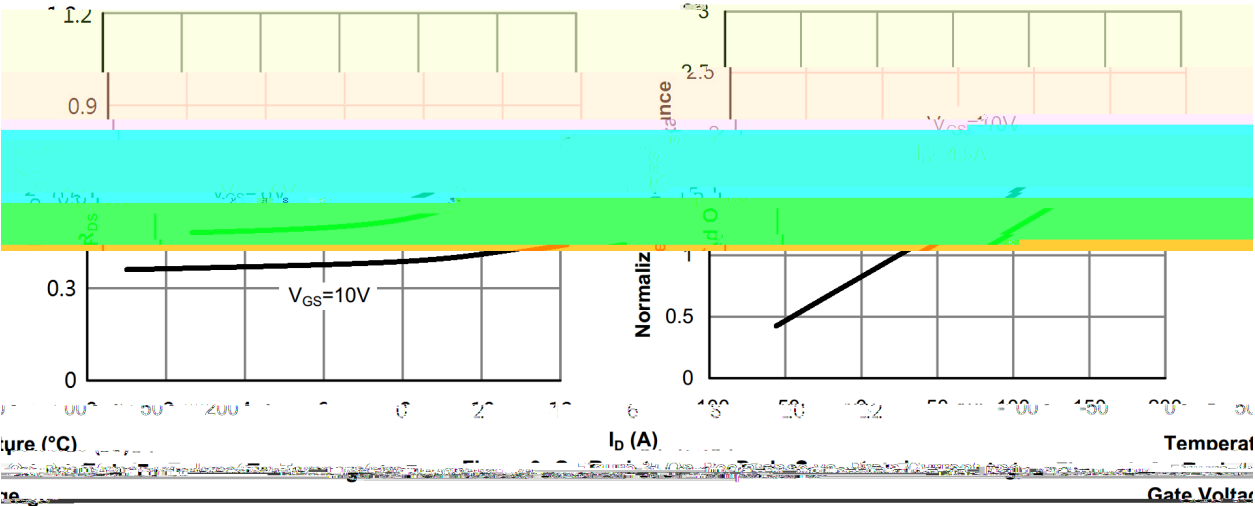
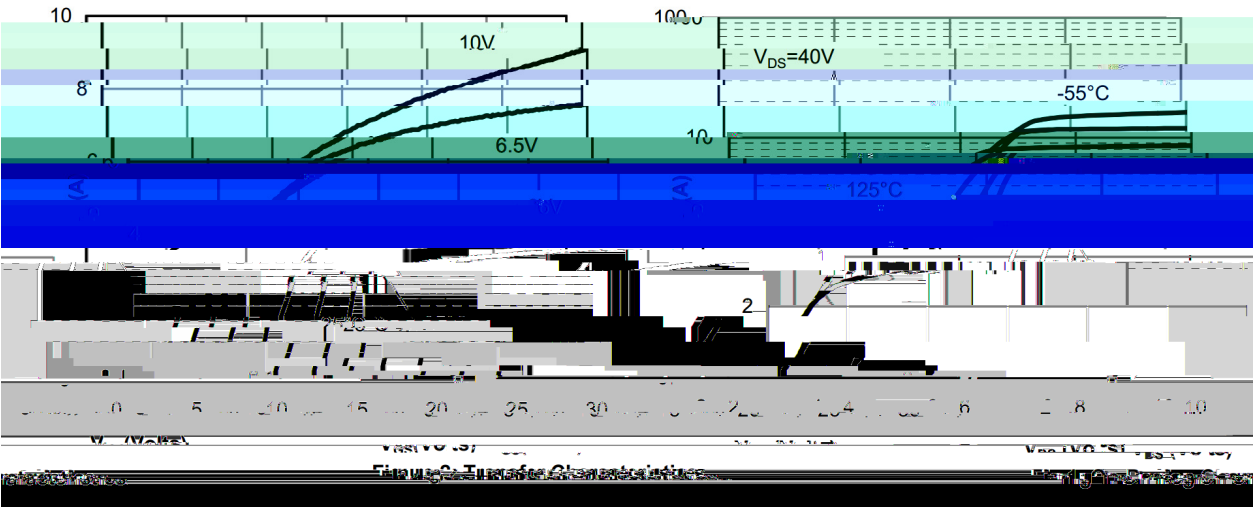
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	200	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	9	A
Drain Current - Pulsed	I_{DM}	28.6	A
Gate-Source Voltage	V_{GS}	± 20	V
Avalanche Current	I_{AR}	5	A
Single Pulsed Avalanche Energy	E_{AS}	166	mJ
Power Dissipation ($T_c=25^\circ\text{C}$)	P_D	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_{DS}	$V_{GS}=0V$ $I_D=250\mu A$	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}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	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}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0MHz$		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	$t_{d(on)}$	$V_{DS}=100V$ $I_D=9.0A$ $R_G=25\Omega$		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}	$V_{GS} = 0V,$ $I_S = 9.0A,$ $dI_F/dt = 100 A/\mu G S$				

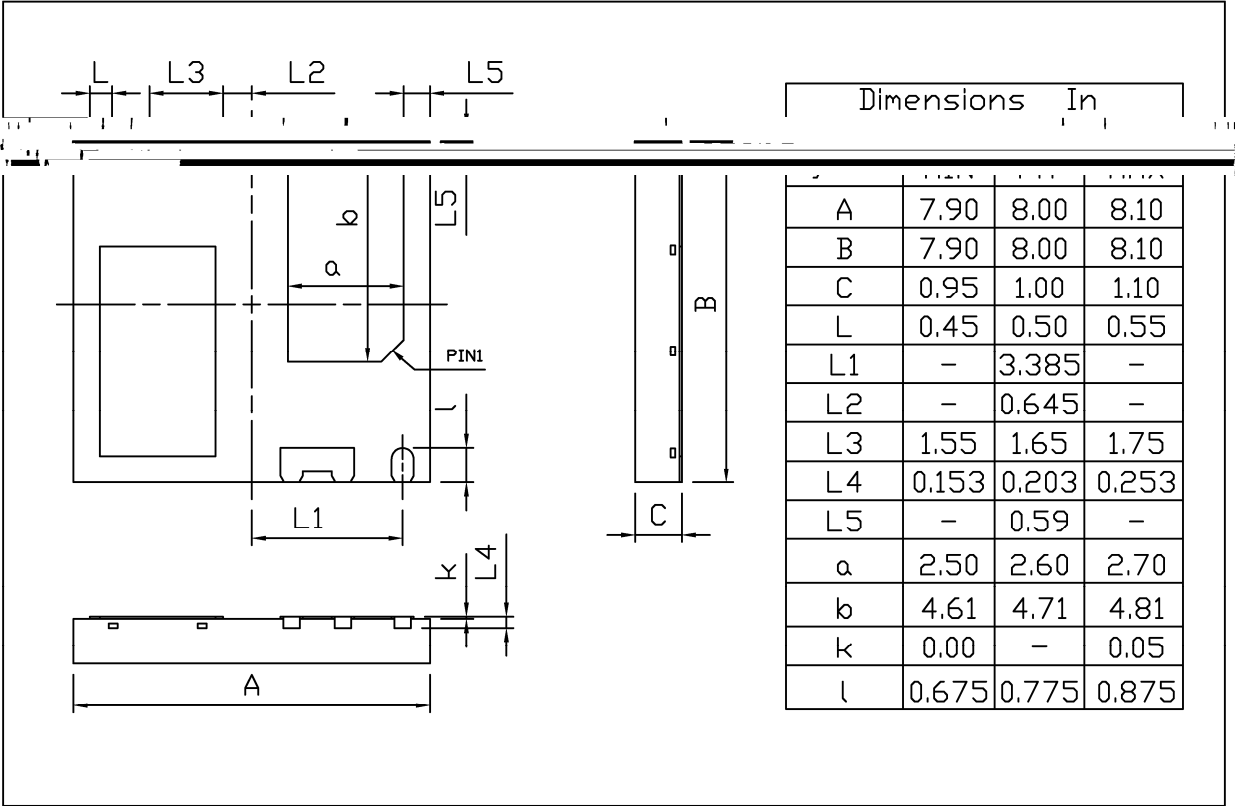
/ Electrical Characteristic Curve



/ Package Dimensions

DFN8X8-4L

Unit:mm



REV.00 202307

