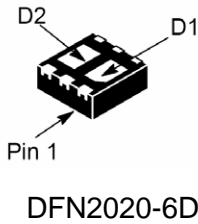


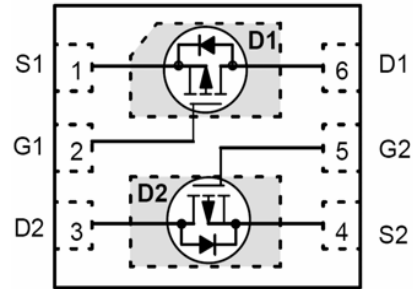
FEATURES

- $V_{DS} = -20V$
- $R_{DS(ON)}, V_{GS}@-4.5V, I_{DS}@-2A \leq 100m\Omega$
- $R_{DS(ON)}, V_{GS}@-2.5V, I_{DS}@-1.8A \leq 130m\Omega$
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



APPLICATIONS

- Simple drive requirement
- Small package outline
- Surface mount device



DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LXP0320C	DP3	4000/Tape&Reel

MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Drain-Source Voltage	V_{DSS}	-20	V
Gate-to-Source Voltage – Continuous	V_{GS}	± 12	V
Drain Current			
– Continuous $T_A = 25^\circ C$	I_D	-3	A
– Pulsed (Note 1)	I_{DM}	-12	

THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Power Dissipation	P_D	1.4	W
Thermal Resistance, Junction-to-Ambient(Note 2)	$R_{\theta JA}$	85	$^\circ C/W$
Junction and Storage temperature	T_J, T_{stg}	-55~ +150	$^\circ C$

1.Repetitive Rating: Pulse width limited by the maximum junction temperature.

2.1-in²oz Cu PCB board.

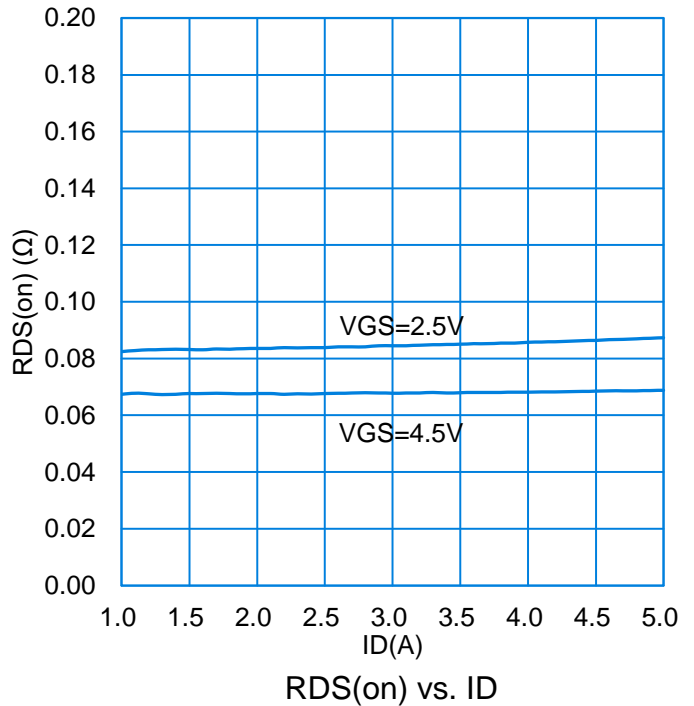
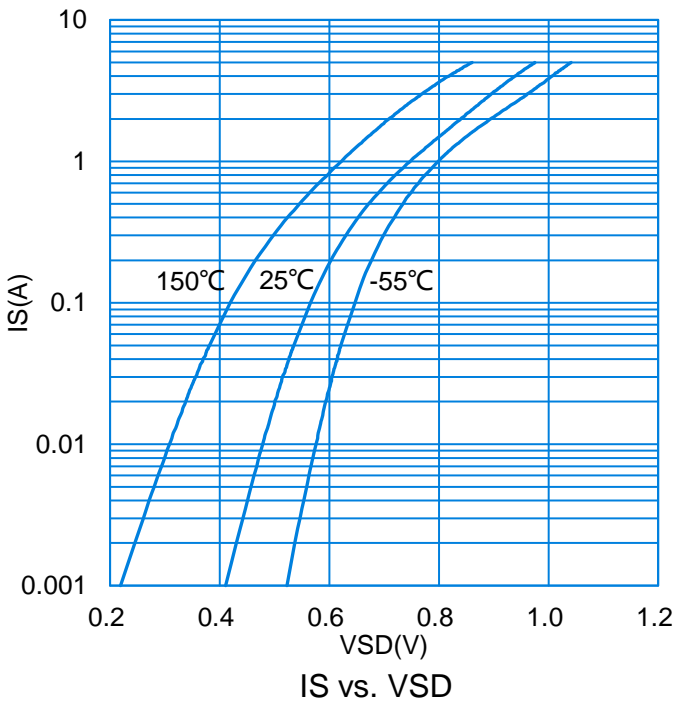
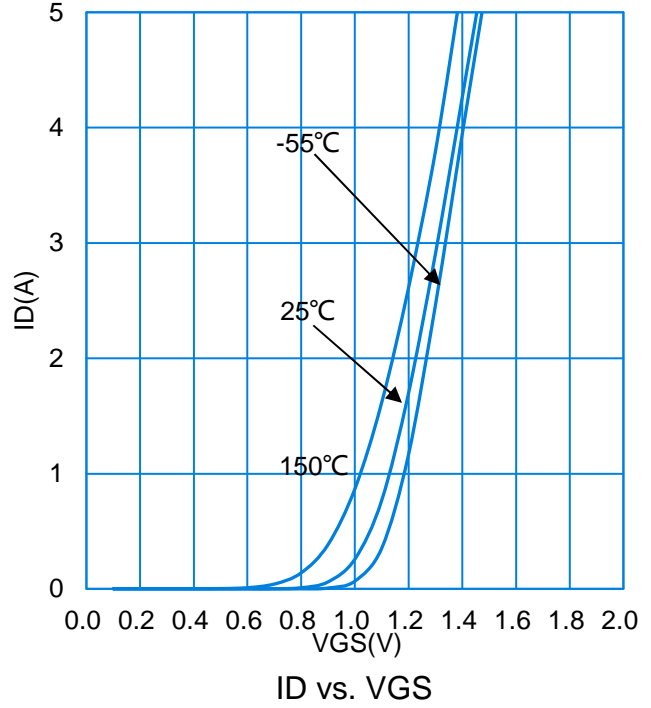
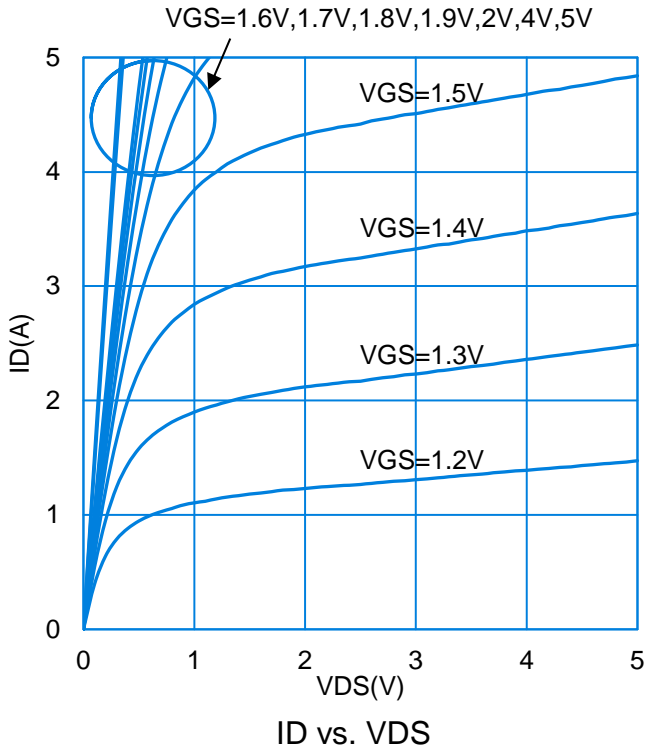


ELECTRICAL CHARACTERISTICS (Ta= 25°C)

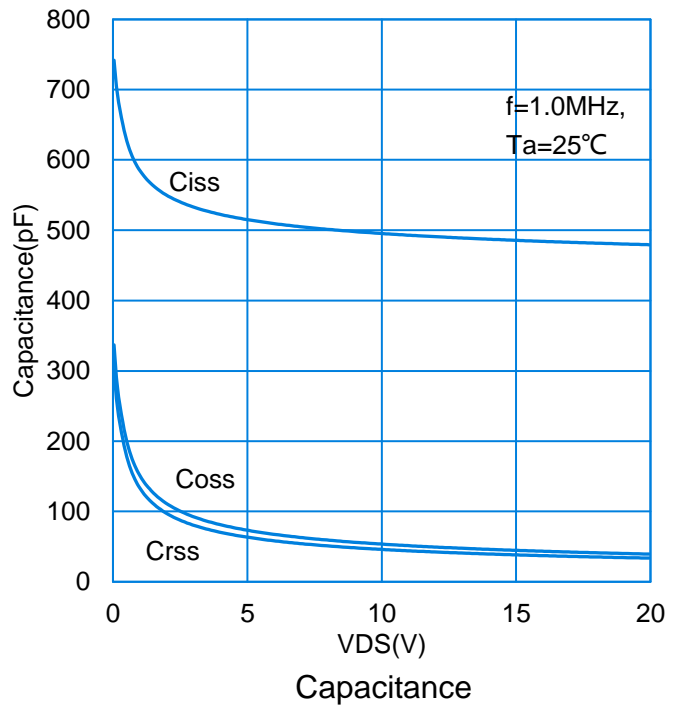
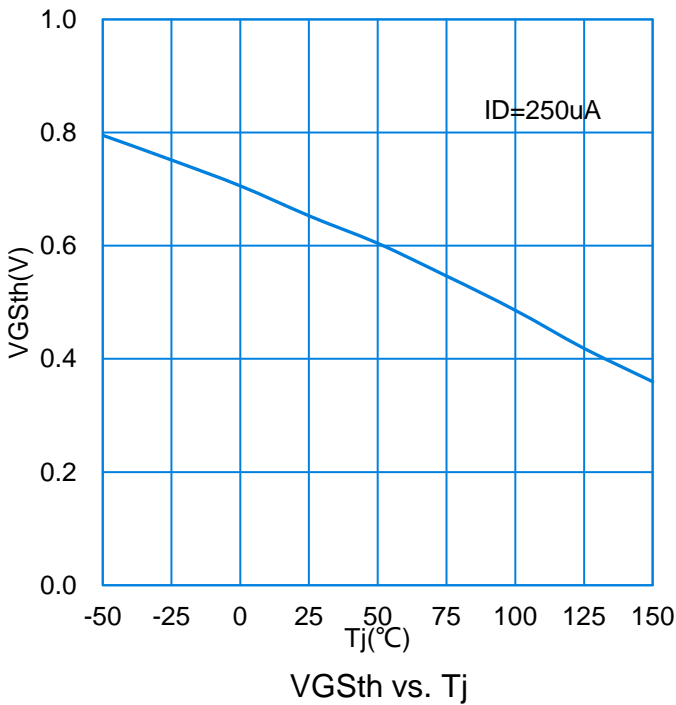
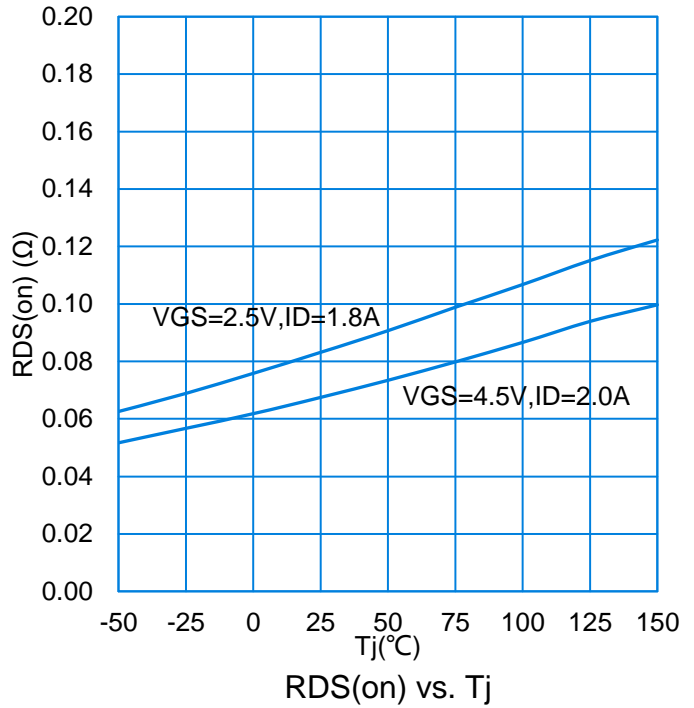
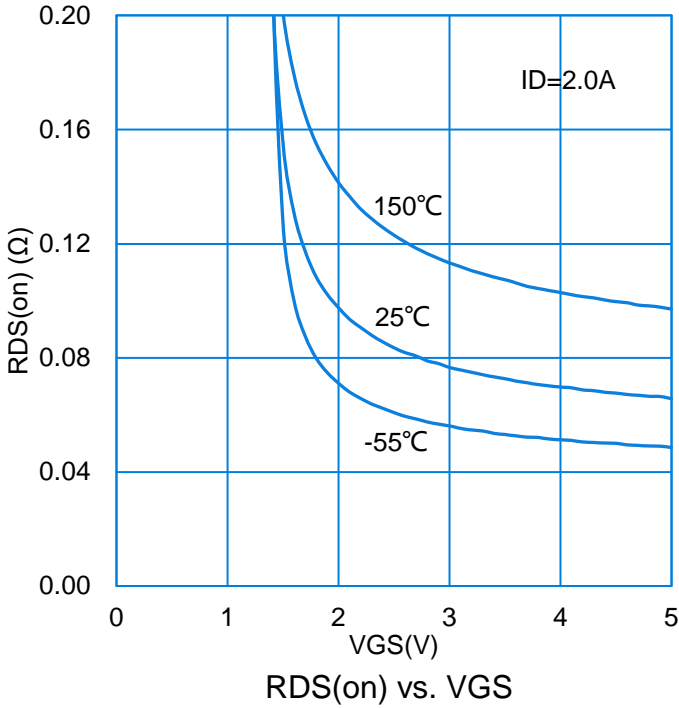
Characteristic	Symbol	Min.	Typ.	Max.	Unit	
Static						
Drain-Source Breakdown Voltage (V _{GS} = 0 V, I _D = -250 μA)	V _{BRDSS}	-20	-	-	V	
Gate-Source Threshold Voltage (V _{DS} = V _{GS} , I _D = -250 μA)	V _{GS(th)}	-0.4	-	-0.9	V	
Gate-Body Leakage Current (V _{DS} = 0 V, V _{GS} = ±12 V)	I _{GSS}	-	-	±100	nA	
Zero Gate Voltage Drain Current (V _{DS} = -16 V, V _{GS} = 0 V)	I _{DSS}	-	-	-1	uA	
Drain-Source On-Resistance(Note 3) (V _{GS} = -4.5 V, I _D = -2 A) (V _{GS} = -2.5 V, I _D = -1.8 A)	R _{DS(ON)}	-	-	100 130	mΩ	
Diode Forward Voltage (I _S = -1 A, V _{GS} = 0 V)	V _{SD}	-0.4	-0.8	-1.2	V	
Dynamic						
Total Gate Charge	(V _{DS} = -10V, V _{GS} = -4.5V, I _D = -2A)	Q _g	-	5.4	-	nC
Gate to Source Charge		Q _{gs}	-	0.6	-	
Gate to Drain Charge		Q _{gd}	-	1.6	-	
Turn-on Delay Time	(V _{DS} = -10 V, I _D = -1 A, R _L = 10Ω, V _{GS} = -4.5 V, R _G = 6.2 Ω)	t _{d(on)}	-	4.5	-	nS
Rise Time		t _r	-	6.2	-	
Turn-Off Delay Time		t _{d(off)}	-	95	-	
Fall Time		t _f	-	47	-	
Input Capacitance	(V _{DS} = -10 V, V _{GS} = 0 V, f = 1MHz)	C _{iss}	-	497	-	pF
Output Capacitance		C _{oss}	-	55	-	
Reverse Transfer Capacitance		C _{rss}	-	47	-	

3.Pulse test: PW≤300us duty cycle ≤ 2%.

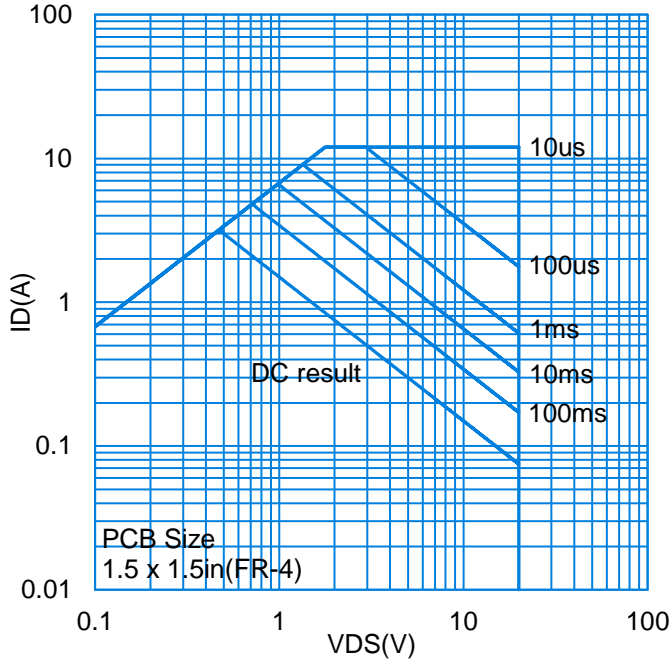
ELECTRICAL CHARACTERISTICS CURVES



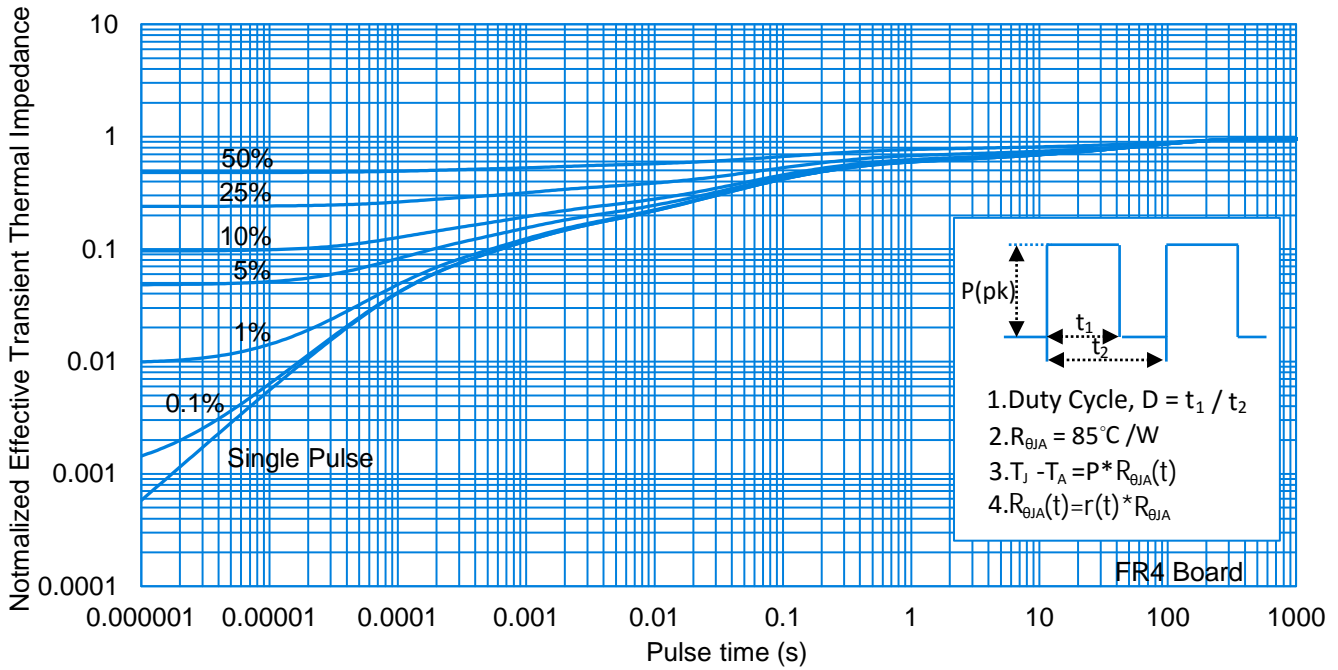
ELECTRICAL CHARACTERISTICS CURVES(Con.)



ELECTRICAL CHARACTERISTICS CURVES(Con.)



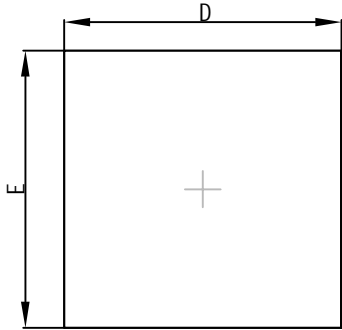
Safe Operating Area



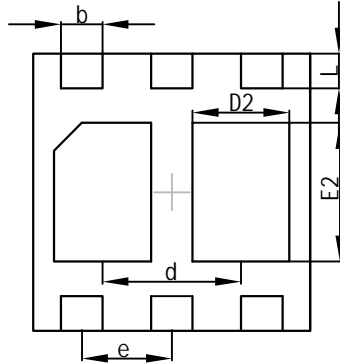
Thermal Response

OUTLINE AND DIMENSIONS (Unit:mm)

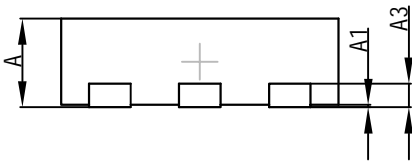
DFN2020 6D



TOP VIEW



BOTTOM VIEW

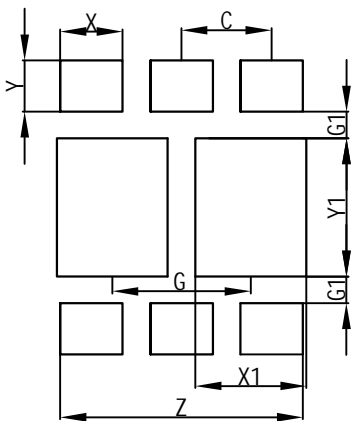


SIDE VIEW

DFN2020 6D			
Dim	Min	Typ	Max
D	1.95	2.00	2.05
E	1.95	2.00	2.05
e	-	0.65	-
L	0.20	0.25	0.30
b	0.25	0.30	0.35
d	-	1.00	-
A	0.45	0.65	0.70
A1	0	0.02	0.05
A3	-	0.152	-
E2	0.95	1.00	1.05
D2	0.65	0.70	0.75
All Dimensions in mm			

SOLDERING FOOTPRINT

DFN2020 6D



Dimensions	(mm)
X	0.45
Y	0.37
X1	0.80
Y1	1.00
C	0.65
G	1.00
G1	0.19
Z	1.75