20V N-Channel Enhancement Mode MOSFET

Description

The NP2040D3 uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge.It can be used in a wide variety of applications.

General Features

- V_{DS}

Electrical Characteristics (TA=25 unless otherwise noted)

Parameter	Symbol	Condition		Min	Typ	Max	Unit
Static Characteristics							
Drain-source breakdown voltage	BV_{DSS}	V_{GS}=0V, I_D=250μA		20	-	-	V
Zero gate voltage drain current	I_{DSS}	V_{DS}=20V, V_{GS}=0V	T_J=25°C	-	-	1	μA
			T_J=85°C	-	-	5	
Gate Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS}=±12V		-	-	±100	nA

Typical Performance Characteristics

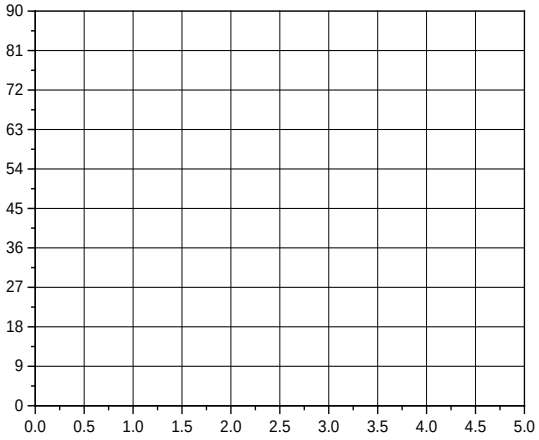


Fig1 Output Characteristics

Fig2 Transfer Characteristics

Fig3 Rdson-Drain current

Fig4 Capacitance vs Vds

Fig5 Rdson-Gate Drain voltage

Fig6 Gate Charge

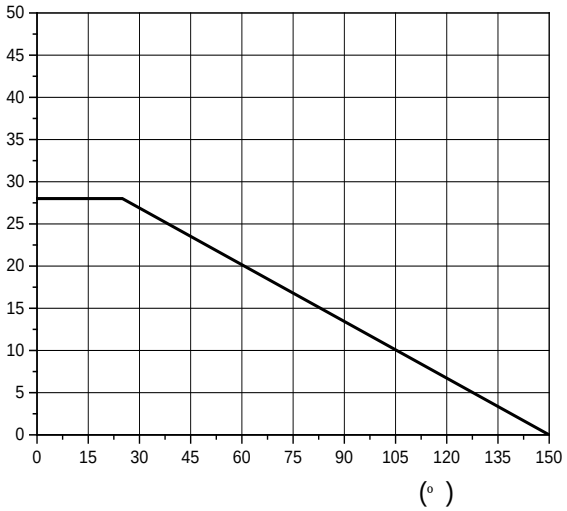


Fig7 Power De-rating

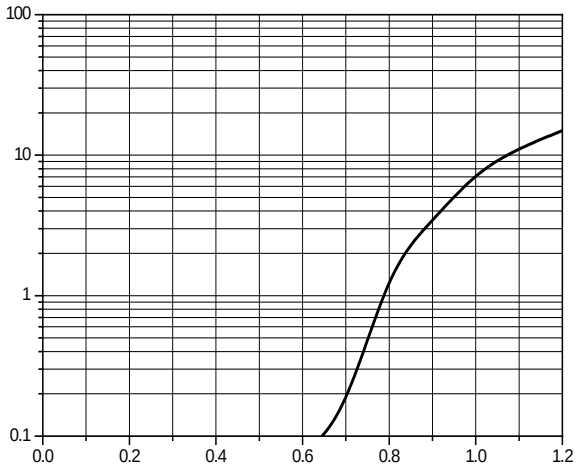
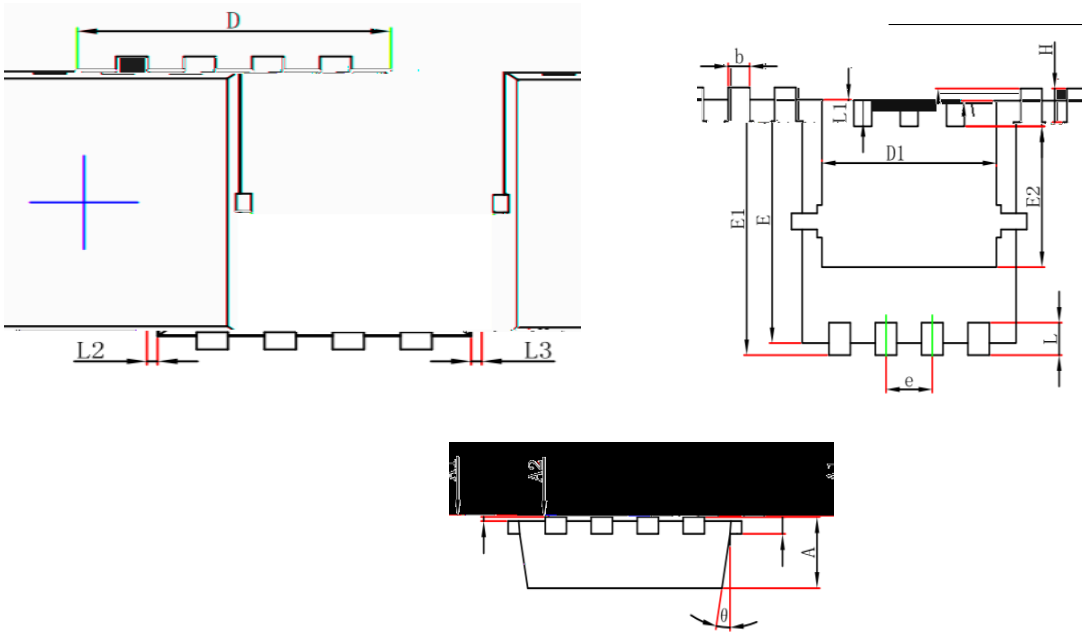


Fig8 Source-Drain Diode Forward

Package Information

- **PDFN3.3*3.3-8L**



			D	
			D1	
			E	
			E1	
			E2	
0.008	0.016	b	0.200	0.400
0.030	e	0.550	0.750	0.022
L2		0~0.100		0~0.004
L3		0~0.100		0~0.004
θ	9°	13°	9°	13°