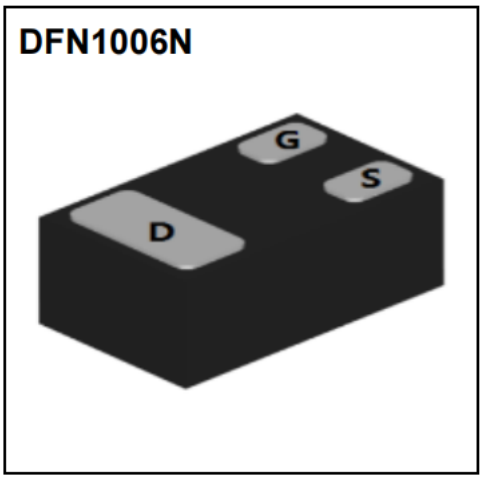
DFN1006N Plastic-Encapsulate MOSFETS

N-Channel 60-V(D-S) MOSFET

$V_{(BR)DSS}$	$R_{DS(on)}$MAX	I_D
60V	3Ω@10V	0.7A
	4Ω@4.5V	



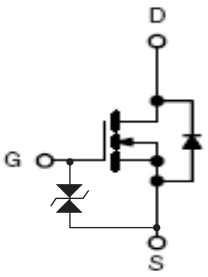
FEATURE

- TrenchFET Power MOSFET

APPLICATION

- Load Switch for Portable Devices
- DC/DC Converter
- 3000V ESD Protected

Equivalent Circuit



Maximum ratings (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	0.7	A
Continuous Source-Drain Current(Diode Conduction)	I_S	0.6	
Power Dissipation	P_D	0.4	W
Thermal Resistance from Junction to Ambient (t≤5s)	$R_{\theta JA}$	312.5	℃/W
Operating Junction	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~+150	

DFN1006N Plastic-Encapsulate MOSFETS

ELECTRICAL CHARACTERISTICS (Ta= 25℃, unless otherwise specified.)

● Limiting Values

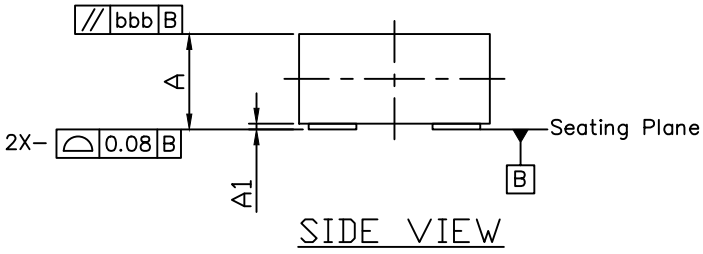
Symbol	Parameter	Rating	Unit
V_{DSS}	Drain-Source Voltage	60	V
V_{GSS}	Gate-Source Voltage	± 20	

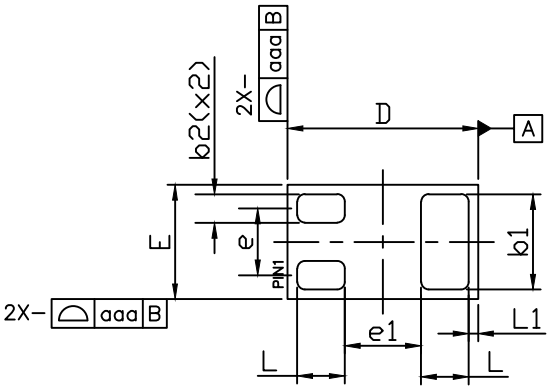
● Electrical Characteristics (Ta = 25 °C Unless Otherwise Noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Static Characteristics						
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS} = 0 V, I_{DS} = 250 μA	60	-	-	V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS} = V_{GS}, I_{DS} = 250 μA	0.8	1.5	2.5	V
I_{DSS}	Drain Leakage Current	V_{DS} = 48 V, V_{GS} = 0V	-	-	1	μA
		T_J = 85 °C	-	-	30	μA
I_{GSS}	Gate Leakage Current	V_{GS} = ±20 V, V_{DS} = 0 V	-	-	± 10	μA
$R_{DS(ON)}$[a]	On-State Resistance	V_{GS} = 10 V, I_{DS} = 0.5 A	-	1.9	3	Ω
		V_{GS} = 4.5 V, I_{DS} = 0.2 A	-	2.4	4	
Diode Characteristics						
V_{SD}	Diode Forward Voltage	I_{SD} = 0.5 A, V_{GS} = 0 V	-	0.7	1.3	V

DFN1006N Plastic-Encapsulate MOSFETS

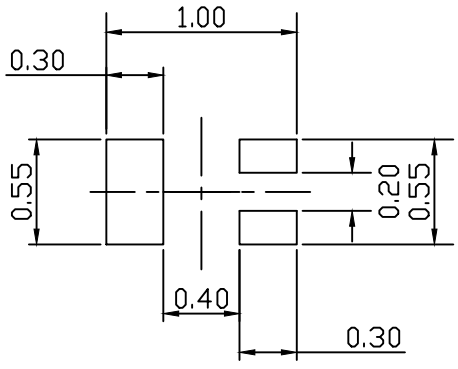
DFN1006N PACKAGE OUTLINE





SYMBOLS	DIMENSIONS IN MILLIMETERS			DIMENSIONS IN INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.47	0.52	0.55	0.019	0.020	0.022
A1	0.00	0.03	0.05	0.000	0.001	0.002
b1	0.45	0.50	0.55	0.018	0.020	0.022
b2	0.10	0.15	0.20	0.004	0.006	0.008
D	0.95	1.00	1.05	0.037	0.039	0.041
E	0.55	0.60	0.65	0.022	0.024	0.026
e	---	0.35	---	---	0.014	---
e1	---	0.40	---	---	0.016	---
L	0.20	0.25	0.30	0.008	0.010	0.012
L1	---	0.05	---	---	0.002	---
aaa	0.15			0.006		
bbb	0.05			0.002		

Suggested Pad Layout (mm)



UNIT: mm