

Dual N-Channel 250V Enhancement Mode MOSFETs

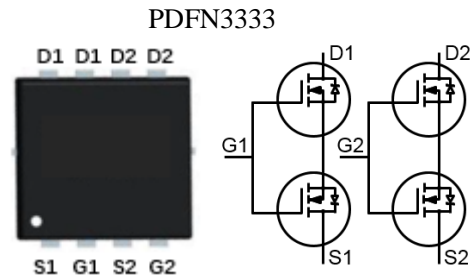
General Features

- Proprietary Advanced Planar Technology
- Rugged Polysilicon Gate Cell Structure
- Proprietary Advanced High V_{th} Technology
- RoHS Compliant
- Halogen-free available

BV_{DSS}	$R_{DS(ON)}$ (Max.)	I_D
250V	25 Ω	0.9A

Ordering Information

Part Number	Package	Marking	Remark
FTF25N35DHVT	PDFN3333	25N35DHVT	Halogen Free



Absolute Maximum Ratings

$T_A=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	FTF25N35DHVT	Unit
V_{DSS}	Drain-to-Source Voltage ^[1]	250	V
I_D	Continuous Drain Current	0.9	A
I_{DM}	Pulsed Drain Current ^[2]	3.6	
P_D	Power Dissipation	16	W
V_{GS}	Gate-to-Source Voltage	± 20	V
T_L	Soldering Temperature Distance of 1.6mm from case for 10 seconds	300	$^\circ\text{C}$
T_J and T_{STG}	Operating and Storage Temperature Range	-55 to 150	

Caution: Stresses greater than those listed in the "Absolute Maximum Ratings" may cause permanent damage to the device.

Thermal Characteristics

Symbol	Parameter	FTF25N35DHVT	Unit
$R_{\theta JA}$	Thermal Resistance, Junction-to-Ambient	34	K/W

Electrical Characteristics

OFF Characteristics

 $T_A = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Conditions
BV_{DSS}	Drain-to-Source Breakdown Voltage	250	--	--	V	$V_{GS}=0V, I_D=250\mu A$
I_{DSS}	Drain-to-Source Leakage Current	--	--	1	μA	$V_{DS}=250V, V_{GS}=0V$
		--	--	100	μA	$V_{DS}=250V, V_{GS}=0V$ $T_J=125^\circ\text{C}$
I_{GSS}	Gate-to-Source Leakage Current	--	--	1	μA	$V_{GS}=+20V, V_{DS}=0V$
		--	--	-1		$V_{GS}=-20V, V_{DS}=0V$

ON Characteristics

 $T_A = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Conditions
$R_{DS(ON)}$	Static Drain-to-Source On-Resistance	--	12	25	Ω	$V_{GS}=10V, I_D=100mA$ [3]
$V_{GS(TH)}$	Gate Threshold Voltage	2	--	5	V	$V_{GD}=0V, I_D=250\mu A$
$V_{GS(TH)_{REV}}$	Reverse Gate Threshold Voltage	5	--	10	V	$V_{GS}=0V, I_D=-5\mu A$

NOTE:

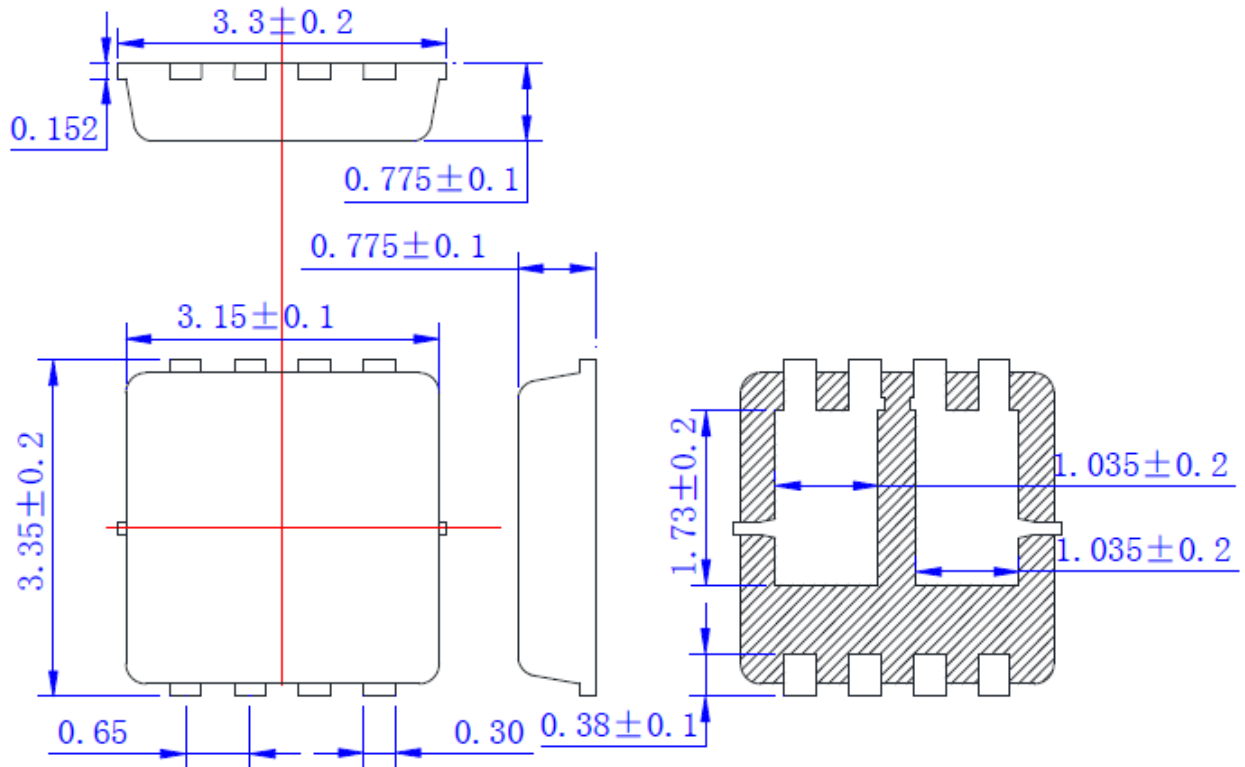
[1] $T_J = +25^\circ\text{C}$ to $+150^\circ\text{C}$

[2] Repetitive rating, pulse width limited by maximum junction temperature.

[3] Pulse width $\leq 380\mu s$; duty cycle $\leq 2\%$.

Package Dimensions

PDFN3333





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