

## Dual N-Channel 250V Enhancement Mode MOSFETs

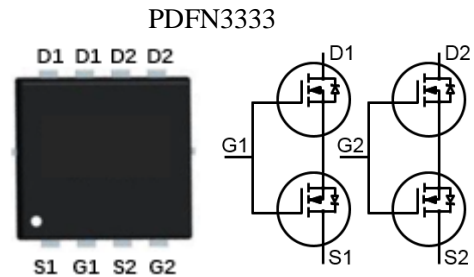
### General Features

- 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.)	$I_D$
<b>250V</b>	<b>25 <math>\Omega</math></b>	<b>0.9A</b>

### 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 <sup>[1]</sup>	250	V
$I_D$	Continuous Drain Current	0.9	A
$I_{DM}$	Pulsed Drain Current <sup>[2]</sup>	3.6	
$P_D$	Power Dissipation	16	W
$V_{GS}$	Gate-to-Source Voltage	$\pm 20$	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	$\mu A$	$V_{DS}=250V, V_{GS}=0V$
		--	--	100	$\mu A$	$V_{DS}=250V, V_{GS}=0V$ $T_J=125^\circ\text{C}$
$I_{GSS}$	Gate-to-Source Leakage Current	--	--	1	$\mu A$	$V_{GS}=+20V, V_{DS}=0V$
		--	--	-1		$V_{GS}=-20V, V_{DS}=0V$

### ON Characteristics

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

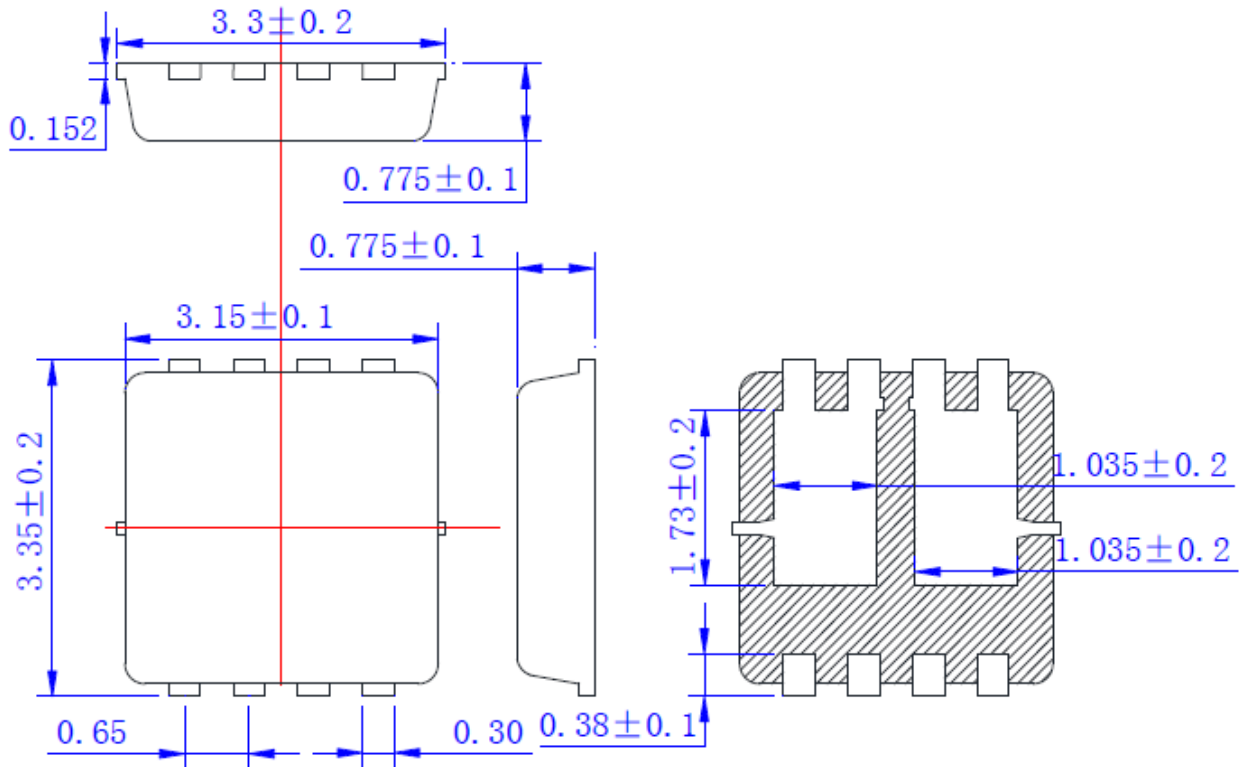
Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Conditions
$R_{DS(ON)}$	Static Drain-to-Source On-Resistance	--	12	25	$\Omega$	$V_{GS}=10V, I_D=100mA$ [3]
$V_{GS(TH)}$	Gate Threshold Voltage	2	--	5	V	$V_{GD}=0V, I_D=250\mu A$
$V_{GS(TH)_{REV}}$	Reverse Gate Threshold Voltage	5	--	10	V	$V_{GS}=0V, I_D=-5\mu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

#### 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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