

Dual P-Channel 350V Enhancement Mode MOSFETs

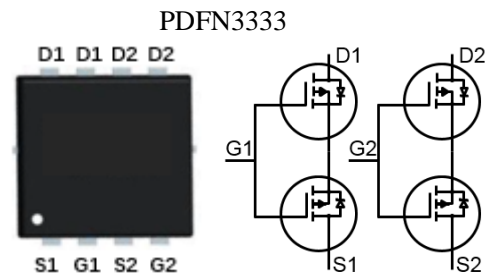
General Features

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

B_VDSS	R_{DS(ON)} (Max.)	I_D
-350V	50 Ω	-0.5A

Ordering Information

Part Number	Package	Marking	Remark
FTF50P35DHVT	PDFN3333	50P35DHVT	Halogen Free



Absolute Maximum Ratings

T_A=25°C unless otherwise specified

Symbol	Parameter	FTF50P35DHVT	Unit
V _{DSS}	Drain-to-Source Voltage ^[1]	-350	V
I _D	Continuous Drain Current	-0.5	A
I _{DM}	Pulsed Drain Current ^[2]	-2.0	
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	°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	FTF50P35DHVT	Unit
R _{θJA}	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	-350	--	--	V	$V_{GS}=0V, I_D=-250\mu A$
I_{DSS}	Drain-to-Source Leakage Current	--	--	-1	μA	$V_{DS}=-350V, V_{GS}=0V$
		--	--	-100	μA	$V_{DS}=-350V, V_{GS}=0V$ $T_J=125^\circ C$
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

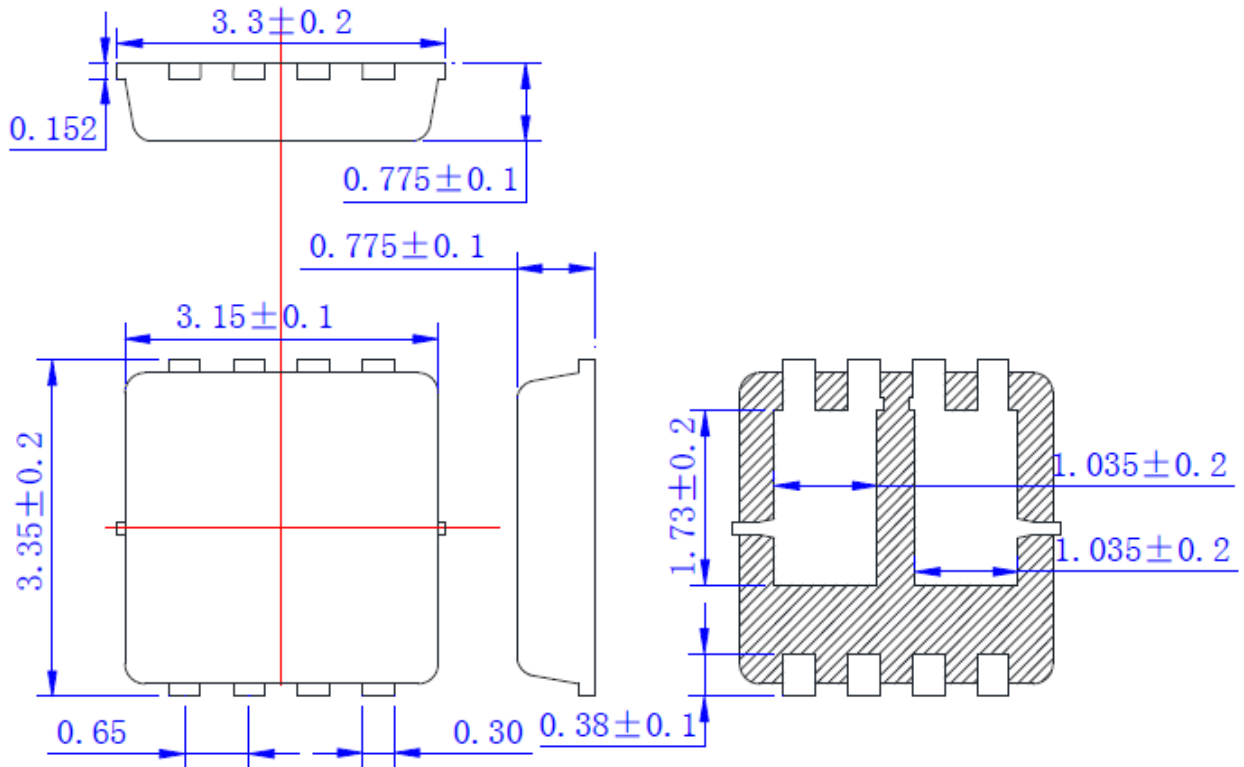
Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Conditions
$R_{DS(ON)}$	Static Drain-to-Source On-Resistance	--	25	50	Ω	$V_{GS}=-10V, I_D=-50mA$ [3]
$V_{GS(TH)}$	Gate Threshold Voltage	-2	--	-5	V	$V_{GD}=0V, I_D=-250\mu A$
$V_{GS(TH_REV)}$	Reverse Gate Threshold Voltage	-5	--	-10	V	$V_{GS}=0V, I_D=5\mu A$

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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