

FDD5614P

60V P-Channel PowerTrench® MOSFET

General Description

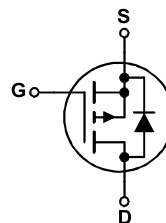
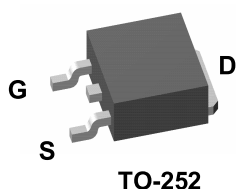
This 60V P-Channel MOSFET uses Fairchild's high voltage PowerTrench process. It has been optimized for power management applications.

Applications

- DC/DC converter
- Power management
- Load switch

Features

- -15 A, -60 V. $R_{DS(ON)} = 100\text{ m}\Omega @ V_{GS} = -10\text{ V}$
 $R_{DS(ON)} = 130\text{ m}\Omega @ V_{GS} = -4.5\text{ V}$
- Fast switching speed
- High performance trench technology for extremely low $R_{DS(ON)}$
- High power and current handling capability



Absolute Maximum Ratings T_A=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V _{DSS}	Drain-Source Voltage	-60	V
V _{GSS}	Gate-Source Voltage	±20	V
I _D	Drain Current – Continuous (Note 3)	-15	A
	– Pulsed (Note 1a)	-45	
P _D	Power Dissipation for Single Operation (Note 1)	42	W
		3.8	
		1.6	
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 to +175	°C

Thermal Characteristics

R _{θJC}	Thermal Resistance, Junction-to-Case (Note 1)	3.5	°C/W
R _{θJA}	Thermal Resistance, Junction-to-Ambient (Note 1a)	40	°C/W
R _{θJA}	Thermal Resistance, Junction-to-Ambient (Note 1b)	96	°C/W

Package Marking and Ordering Information

Device Marking	Device	Reel Size	Tape width	Quantity
FDD5614P	FDD5614P	13"	12mm	2500 units