



PRODUCT NAME : IRF520 N-Channel Mos
fet

PRICE : Rs 25.00

SKU : RM2120



www.robomart.com Copyrights by Robomart.com

DESCRIPTION

Features

- Drain-Source Volt (Vds): 100V
- Gate-Source Volt (Vgs): 100V
- Gate-Source Volt (Vgs): 20V
- Drain Current (Id): 10A
- Power Dissipation (Ptot): 70W
- Type: N-Channel



IRF520
IRF520FI

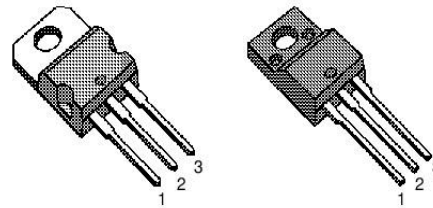
**N - CHANNEL ENHANCEMENT MODE
 POWER MOS TRANSISTORS**

| TYPE | V _{DSS} | R _{DS(on)} | I _D |
|----------|------------------|---------------------|----------------|
| IRF520 | 100 V | < 0.27 Ω | 10 A |
| IRF520FI | 100 V | < 0.27 Ω | 7 A |

- TYPICAL R_{DS(on)} = 0.23 Ω
- AVALANCHE RUGGED TECHNOLOGY
- 100% AVALANCHE TESTED
- REPETITIVE AVALANCHE DATA AT 100°C
- LOW GATE CHARGE
- HIGH CURRENT CAPABILITY
- 175°C OPERATING TEMPERATURE

APPLICATIONS

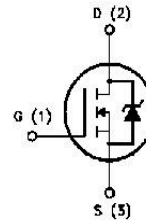
- HIGH CURRENT, HIGH SPEED SWITCHING
- SOLENOID AND RELAY DRIVERS
- REGULATORS
- DC-DC & DC-AC CONVERTERS
- MOTOR CONTROL, AUDIO AMPLIFIERS
- AUTOMOTIVE ENVIRONMENT (INJECTION, ABS, AIR-BAG, LAMPDRIVERS, Etc.)



TO-220

ISOWATT220

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter | Value | | Unit |
|---------------------|--|------------|----------|------|
| | | IRF520 | IRF520FI | |
| V _{DS} | Drain-source Voltage (V _{GS} = 0) | 100 | | V |
| V _{DGR} | Drain- gate Voltage (R _{GS} = 20 kΩ) | 100 | | V |
| V _{GS} | Gate-source Voltage | ± 20 | | V |
| I _D | Drain Current (cont.) at T _c = 25 °C | 10 | 7 | A |
| I _D | Drain Current (cont.) at T _c = 100 °C | 7 | 5 | A |
| I _{DM} (*) | Drain Current (pulsed) | 40 | 40 | A |
| P _{tot} | Total Dissipation at T _c = 25 °C | 70 | 35 | W |
| | Derating Factor | 0.47 | 0.23 | W/°C |
| V _{ISO} | Insulation Withstand Voltage (DC) | — | 2000 | V |
| T _{stg} | Storage Temperature | -65 to 175 | | °C |
| T _j | Max. Operating Junction Temperature | 175 | | °C |

(*) Pulse width limited by safe operating area



**IRF520
 IRF520FI**

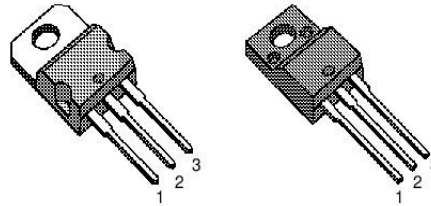
**N - CHANNEL ENHANCEMENT MODE
 POWER MOS TRANSISTORS**

| TYPE | V _{DSS} | R _{DS(on)} | I _D |
|----------|------------------|---------------------|----------------|
| IRF520 | 100 V | < 0.27 Ω | 10 A |
| IRF520FI | 100 V | < 0.27 Ω | 7 A |

- TYPICAL R_{DS(on)} = 0.23 Ω
- AVALANCHE RUGGED TECHNOLOGY
- 100% AVALANCHE TESTED
- REPETITIVE AVALANCHE DATA AT 100°C
- LOW GATE CHARGE
- HIGH CURRENT CAPABILITY
- 175°C OPERATING TEMPERATURE

APPLICATIONS

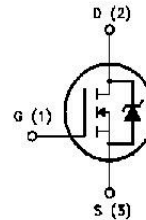
- HIGH CURRENT, HIGH SPEED SWITCHING
- SOLENOID AND RELAY DRIVERS
- REGULATORS
- DC-DC & DC-AC CONVERTERS
- MOTOR CONTROL, AUDIO AMPLIFIERS
- AUTOMOTIVE ENVIRONMENT (INJECTION, ABS, AIR-BAG, LAMPDRIVERS, Etc.)



TO-220

ISOWATT220

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter | Value | | Unit |
|---------------------|--|------------|----------|------|
| | | IRF520 | IRF520FI | |
| V _{DS} | Drain-source Voltage (V _{GS} = 0) | 100 | | V |
| V _{DGR} | Drain- gate Voltage (R _{GS} = 20 kΩ) | 100 | | V |
| V _{GS} | Gate-source Voltage | ± 20 | | V |
| I _D | Drain Current (cont.) at T _c = 25 °C | 10 | 7 | A |
| I _D | Drain Current (cont.) at T _c = 100 °C | 7 | 5 | A |
| I _{DM} (*) | Drain Current (pulsed) | 40 | 40 | A |
| P _{tot} | Total Dissipation at T _c = 25 °C | 70 | 35 | W |
| | Derating Factor | 0.47 | 0.23 | W/°C |
| V _{ISO} | Insulation Withstand Voltage (DC) | — | 2000 | V |
| T _{stg} | Storage Temperature | -65 to 175 | | °C |
| T _j | Max. Operating Junction Temperature | 175 | | °C |

(*) Pulse width limited by safe operating area

