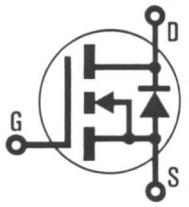
New Jersey Semi-Conductor Products, Inc.

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HEXFET® TRANSISTORS IRFF110

N-CHANNEL POWER MOSFETs TO-39 PACKAGE



IRFF111
IRFF112
IRFF113

100 Volt, 0.60 Ohm HEXFET®

Features:

- Fast Switching
- Low Drive Current
- Ease of Paralleling
- No Second Breakdown
- Excellent Temperature Stability

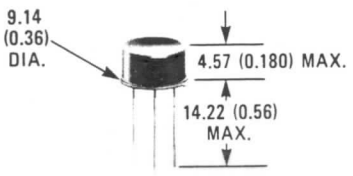
The HEXFET transistors also feature all of the well established advantages of MOSFETs such as voltage control, freedom from second breakdown, very fast switching, ease of paralleling, and temperature stability of the electrical parameters.

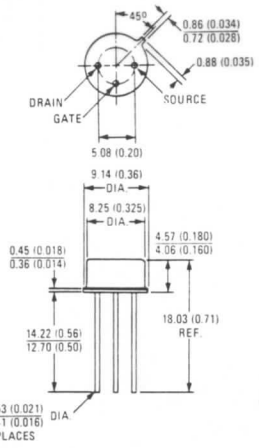
They are well suited for applications such as switching power supplies, motor controls, inverters, choppers, audio amplifiers, and high energy pulse circuits.

Product Summary

Part Number	V_{DS}	$R_{DS(on)}$	I_D
IRFF110	100V	0.6Ω	3.5A
IRFF111	60V	0.6Ω	3.5A
IRFF112	100V	0.8Ω	3.0A
IRFF113	60V	0.8Ω	3.0A

CASE STYLE AND DIMENSIONS





Conforms to JEDEC Outline TO-205AF (TO-39)
Dimensions in Millimeters and (Inches)

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

Source-Drain Diode Ratings and Characteristics

I_S	Continuous Source Current (Body Diode)	IRFF110 IRFF111	–	–	3.5	A	Modified MOSFET symbol showing the integral reverse P-N junction rectifier. 
		IRFF112 IRFF113	–	–	3.0	A	
I_{SM}	Pulse Source Current (Body Diode) ③	IRFF110 IRFF111	–	–	14	A	
		IRFF112 IRFF113	–	–	12	A	
V_{SD}	Diode Forward Voltage ②	IRFF110 IRFF111	–	–	2.5	V	T_C = 25°C, I_S = 3.5A, V_{GS} = 0V
		IRFF112 IRFF113	–	–	2.0	V	T_C = 25°C, I_S = 3.0A, V_{GS} = 0V
t_{rr}	Reverse Recovery Time	ALL	–	200	–	ns	T_J = 150°C, I_F = 3.5A, dI_F/dt = 100A/μs
Q_{RR}	Reverse Recovered Charge	ALL	–	1.0	–	μC	T_J = 150°C, I_F = 3.5A, dI_F/dt = 100A/μs
t_{on}	Forward Turn-on Time	ALL	Intrinsic turn-on time is negligible. Turn-on speed is substantially controlled by $L_S + L_D$.				

① T_J = 25°C to 150°C. ② Pulse Test: Pulse width ≤ 300μs, Duty Cycle ≤ 2%. ③ Repetitive Rating: Pulse width limited by max. junction temperature. See Transient Thermal Impedance Curve (Fig. 5).