

# MOSPOWER Cross Reference List (Cont'd)

## INTERNATIONAL RECTIFIER (Cont'd)

Industry Part No.	BVDSS (Volts)	r <sub>DS(on)</sub> (Ohms)	Package	Siliconix Equivalent	BVDSS (Volts)	r <sub>DS(on)</sub> (Ohms)
IRF9130	100	0.3	TO-3	IRF9130*	—	—
IRF9131	60	0.3	TO-3	IRF9131	—	—
IRF9132	100	0.4	TO-3	IRF9132	—	—
IRF9133	60	0.4	TO-3	IRF9133	—	—
IRF9230	200	0.8	TO-3	—	—	—
IRF9231	150	0.8	TO-3	—	—	—
IRF9232	200	1.2	TO-3	—	—	—
IRF9233	150	1.2	TO-3	—	—	—
IRF9520	100	0.6	TO-220	IRF9520*	—	—
IRF9521	60	0.6	TO-220	IRF9521	—	—
IRF9522	100	0.8	TO-220	IRF9522	—	—
IRF9523	60	0.8	TO-220	IRF9523	—	—
IRF9530	100	0.3	TO-220	IRF9530*	—	—
IRF9531	60	0.3	TO-220	IRF9531	—	—
IRF9532	100	0.4	TO-220	IRF9532	—	—
IRF9533	60	0.4	TO-220	IRF9533	—	—
IRF9610	200	3.0	TO-220	—	—	—
IRF9611	150	3.0	TO-220	—	—	—
IRF9612	200	4.5	TO-220	—	—	—
IRF9613	150	4.5	TO-220	—	—	—
IRF9620	200	1.5	TO-220	—	—	—
IRF9621	150	1.5	TO-220	—	—	—
IRF9622	200	2.4	TO-220	—	—	—
IRF9623	150	2.4	TO-220	—	—	—
IRF9630	200	0.8	TO-220	—	—	—
IRF9631	150	0.8	TO-220	—	—	—
IRF9632	200	1.2	TO-220	—	—	—
IRF9633	150	1.2	TO-220	—	—	—
IRFF110	100	0.6	TO-39	—	—	—
IRFF111	60	0.6	TO-39	—	—	—
IRFF112	100	0.8	TO-39	—	—	—
IRFF113	60	0.8	TO-39	—	—	—
IRFF120	100	0.30	TO-39	IRFF120	—	—
IRFF121	60	0.30	TO-39	IRFF121	—	—
IRFF122	100	0.40	TO-39	IRFF122	—	—
IRFF123	60	0.40	TO-39	IRFF123	—	—
IRFF130	100	0.18	TO-39	—	—	—
IRFF131	60	0.18	TO-39	—	—	—
IRFF132	100	0.25	TO-39	—	—	—
IRFF133	60	0.25	TO-39	—	—	—
2N6755	60	0.25	TO-3	IRF131	—	—
2N6756	100	0.18	TO-3	IRF130	—	—
2N6757	150	0.6	TO-3	—	—	—
2N6758	200	0.4	TO-3	—	—	—
2N6759	350	1.5	TO-3	IRF333	—	—
2N6760	400	1.0	TO-3	IRF330	—	—
2N6761	450	2.0	TO-3	IRF433	—	—
2N6762	500	1.5	TO-3	IRF430	—	—
2N6763	60	0.08	TO-3	—	—	—
2N6764	100	0.055	TO-3	—	—	—
2N6765	150	0.120	TO-3	—	—	—
2N6766	200	0.085	TO-3	—	—	—
2N6767	350	0.4	TO-3	—	—	—
2N6768	400	0.3	TO-3	—	—	—
2N6769	450	0.5	TO-3	—	—	—
2N6770	500	0.4	TO-3	—	—	—
2N6781	60	0.6	TO-39	—	—	—
2N6782	100	0.6	TO-39	—	—	—
2N6783	150	1.5	TO-39	—	—	—
2N6784	200	1.5	TO-39	—	—	—
2N6785	350	3.6	TO-39	—	—	—
2N6786	400	3.6	TO-39	—	—	—
2N6787	60	0.3	TO-39	—	—	—
2N6788	100	0.3	TO-39	—	—	—
2N6789	150	0.8	TO-39	—	—	—
2N6790	200	0.8	TO-39	—	—	—
2N6791	350	1.8	TO-39	—	—	—
2N6792	400	1.8	TO-39	—	—	—
2N6793	450	3.0	TO-39	—	—	—
2N6794	500	3.0	TO-39	—	—	—
2N6795	60	0.18	TO-39	—	—	—

\*Product family available by March 1983

MOSPOWER Cross Reference List

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1

# MOSPOWER Selector Guide (Continued)

## N-Channel MOSPOWER (Continued)

Device	Breakdown Voltage (Volts)	r <sub>DS(on)</sub> (Ohms)	I <sub>D</sub> Continuous (Amps)	Power Dissipation (Watts)	Part Number	
 <p>TO-3</p>	100	0.055	40.0	150	IRF150	
	100	0.08	33.0	150	IRF152	
	100	0.085	27.0	125	IRF140	
	100	0.11	24.0	125	IRF142	
	100	0.18	14.0	100	VN1000A	
	100	0.18	14.0	75	IRF130	
	100	0.25	12.0	100	VN1001A	
	100	0.25	12.0	75	IRF132	
	100	0.3	8.0	40	IRF120	
	100	0.4	7.0	40	IRF122	
	90	4.0	1.9	25	2N6658	
	90	4.5	1.8	25	VN99AA	
	90	5.0	1.7	25	VN90AA	
	80	0.18	14.0	100	VN0800A	
	80	0.25	12.0	100	VN0801A	
	60	0.055	40.0	150	IRF151	
	60	0.08	33.0	150	IRF153	
	60	0.085	27.0	125	IRF141	
	60	0.11	24.0	125	IRF143	
	60	0.12	18.0	100	VN0600A	
	60	0.15	16.0	100	VN0601A	
	60	0.18	14.0	75	IRF131	
	60	0.25	12.0	75	IRF133	
	60	0.3	8.0	40	IRF121	
	60	0.4	10.0	80	VN64GA	
	60	0.4	7.0	40	IRF123	
	60	3.0	2.0	25	2N6657	
	60	3.5	2.0	25	VN67AA	
	40	0.12	18.0	100	VN0400A	
	40	0.15	16.0	100	VN0401A	
	35	1.8	2.0	25	2N6656	
	35	2.5	2.0	25	VN35AA	
	 <p>TO-220AB</p>	500	0.85	8.0	125	IRF840
		500	1.10	7.0	125	IRF842
		500	1.5	4.5	75	VN5001D
500		1.5	4.5	75	IRF830	
500		2.0	4.0	75	VN5002D	
500		2.0	4.0	75	IRF832	
500		3.0	2.5	40	IRF820	
500		4.0	2.0	40	IRF822	
450		0.85	8.0	125	IRF841	
450		1.10	7.0	125	IRF843	
450		1.5	4.5	75	VN4501D	
450		1.5	4.5	75	IRF831	
450		2.0	4.0	75	VN4502D	
450		2.0	4.0	75	IRF833	
450		3.0	2.5	40	IRF821	
450		4.0	2.0	40	IRF823	
400		0.55	10.0	125	IRF740	
400		0.80	8.0	125	IRF742	
400		1.0	6.0	75	VN4000D	
400		1.0	5.5	75	IRF730	
400		1.5	5.0	75	VN4001D	
400		1.5	4.5	75	IRF732	
400		1.8	3.0	40	IRF720	
400		2.5	2.5	40	IRF722	
350		0.55	10.0	125	IRF741	
350		0.80	8.0	125	IRF743	
350		1.0	6.0	75	VN3500D	
350		1.0	5.5	75	IRF731	
350		1.5	5.0	75	VN3501D	
350		1.5	4.5	75	IRF733	
350		1.8	3.0	40	IRF721	
350		2.5	2.5	40	IRF723	
240		6.0	1.4	20	VN2406D	

1

IRF130 ■ IRF131 ■ IRF132 ■ IRF133  
 IRF530 ■ IRF531 ■ IRF532 ■ IRF533



# 100V N-Channel Enhancement Mode MOSPOWER

These power FETs are designed especially for audio amplifiers, power converters, and drivers for motors, solenoids and relays.

## FEATURES

- No Second Breakdown
- High Input Impedance
- Internal Drain-Source Diode
- Very Rugged: Excellent SOA
- Extremely Fast Switching

## BENEFITS

- Reduced Component Count
- Improved Performance
- Simpler Designs
- Improved Reliability

## Product Summary

Part Number	BV <sub>DSS</sub>	R <sub>DS(ON)</sub>	I <sub>D</sub>	Package
IRF130	100V	0.18Ω	14A	TO-3
IRF131	60V			
IRF132	100V	0.25Ω	12A	
IRF133	60V			
IRF530	100V	0.18Ω	14A	TO-220AB
IRF531	60V			
IRF532	100V	0.25Ω	12A	
IRF533	60V			

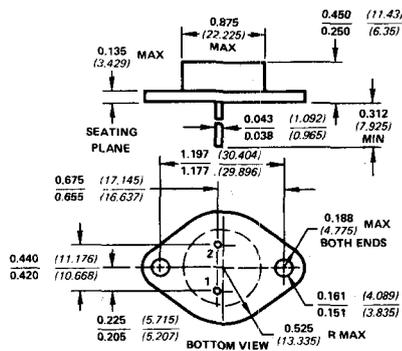


## ABSOLUTE MAXIMUM RATINGS (T<sub>C</sub> = 25°C unless otherwise noted)

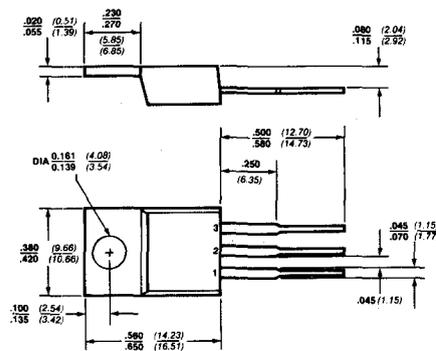
Drain-Source Voltage	
IRF130,132; IRF530,532	100V
IRF131,133; IRF531,533	60V
Drain-Gate Voltage	
IRF130,132; IRF530,532	100V
IRF131,133; IRF531,533	60V
Drain Current Continuous	
IRF130, 131, 530, 531	± 14A
IRF132, 133, 532, 533	± 12A

Drain Current	
Pulsed (80μs to 300μs, 1% duty cycle)	± 56A
Gate Current (Peak)	± 3A
Gate-Source Voltage	± 40V
Total Power Dissipation	75W
Linear Derating Factor	0.6W/°C
Operating and Storage Temperature	-55°C to +150°C

## PACKAGE DIMENSIONS



PIN 1 — Gate  
 PIN 2 — Source  
 CASE — Drain



PIN 1 — Gate  
 PIN 2 & TAB — Drain  
 PIN 3 — Source

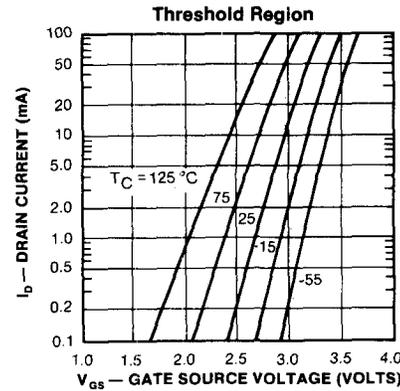
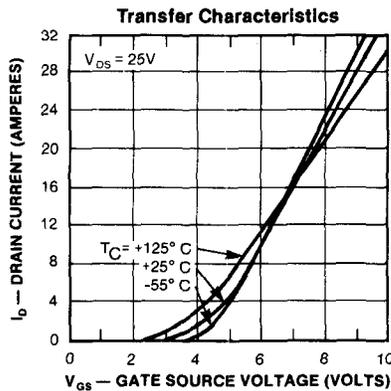
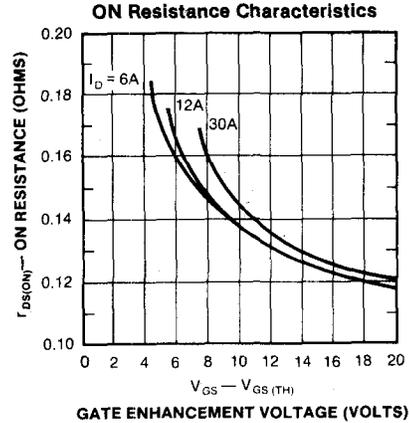
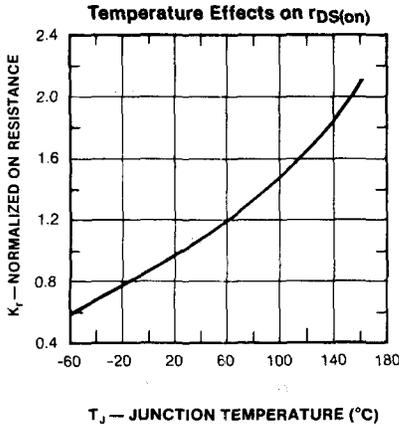
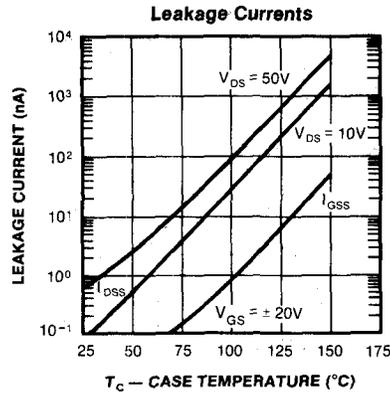
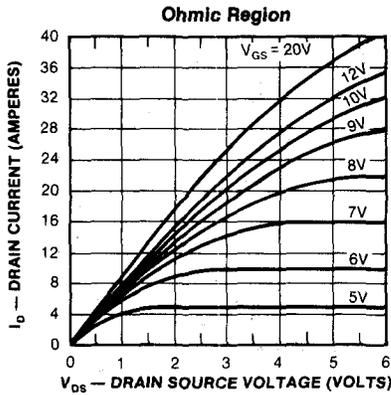
# TYPICAL STATIC CHARACTERISTICS

VNDA12

VNDA12

(Pulse width 80 $\mu$ s—300 $\mu$ s, Duty cycle 1%,  $T_C=25^\circ\text{C}$ )

Part Numbers: VN0800A, VN0801A, VN1000A, VN1001A, VN1200A, VN1201A, VN0800D, VN0801D, VN1000D, VN1001D, VN1200D, VN1201D, IRF130, IRF131, IRF132, IRF133, IRF530, IRF531, IRF532, IRF533



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4

# TYPICAL CHARACTERISTICS (Cont'd)

**VNDA12**

Part Numbers: VN0800A, VN0801A, VN1000A, VN1001A, VN1200A, VN1201A, VN0800D, VN0801D, VN1000D, VN1001D, VN1200D, VN1201D, IRF130, IRF131, IRF132, IRF133, IRF530, IRF531, IRF532, IRF533

## SAFE OPERATING AREA

