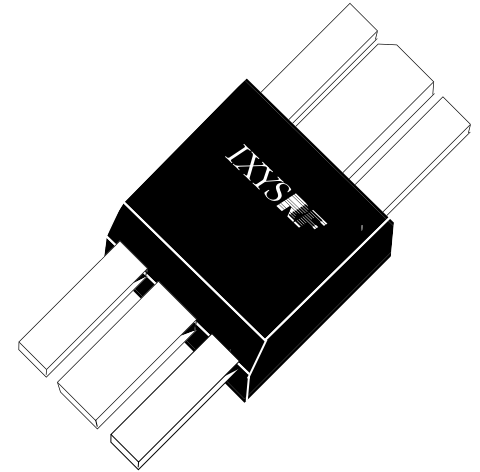


# 500KHz-82MHz POWER MOSFETS

SWITCH MODE POWER SUPPLIES &amp; RF GENERATORS

January 2003

The IXYS RF Switch Mode MOSFET family is ideal for applications requiring fast switching including laser driver, induction heating, switch mode power supplies and other non-linear industrial applications. An extensive product offering is based on the HiPerRF™ MOSFET technology which utilizes a patented double metal approach. The high voltage breakdown ratings combined with low capacitances result in significantly improved impedances and reduced driver design complexity. In addition our new ultra low capacitance **ZMOS™** process is now available. This new process will compliment, not replace, the existing DE SERIES portfolio.



## Z-MOS™ (NEW!) Ultra Low Capacitance RF MOSFET Portfolio

Prerelease data, specifications for Z-MOS subject to change, samples available late April 2003

Part Number	BVDSS	ID (A)	IDM (A)	gfs (S)	CISS	CRSS	COSS	PD (W)	Package
IXZH12N50F2	500	11	72	5	945	25	354	180	TO-247
IXZR12N50F2	500	11	72	5	945	25	354	160	ISOPLUS247
IXZH12N50F2A	500	11	72	5	945	25	354	180	TO-247A
IXZH12N50F2B	500	11	72	5	945	25	354	180	TO-247B
IXZ212N50F2	500	11	72	5	945	25	354	267	DE275
IXZ2212N50F2	500	11 x 2	72 x 2	5	945 x 2	25 x 2	354 x 2	534	DE275X2

\* (600v,800v, 1000v and 1200v devices will be available soon).

## DE SERIES

### 100v (BV<sub>DSS</sub>)

Part Number	BVDSS	ID (A)	IDM (A)	gfs (S)	RDS(ON)	TR(ns)	CISS (pF)	COSS (pF)	CRSS (pF)	PD(W)	Package
DE150-101N09A	100	9	54	8	0.16	4	800	200	30	200	DE150

### 200v (BV<sub>DSS</sub>)

DE150-201N09A	200	15	90	8	0.2	4	700	150	20	200	DE150
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### 500v (BV<sub>DSS</sub>)

DE150-501N04A	500	4.5	27	4	1.5	4	700	90	5	200	DE150
DE275-501N16A	500	16	98	10	0.4	2	1800	150	40	590	DE275
DE375-501N21A	500	25	126	17	0.22	3	2000	200	45	940	DE375
DE475-501N44A	500	48	264	33	0.11	5	5500	230	130	1800	DE475

### 500v (BV<sub>DSS</sub>) Push-Pull Configuration

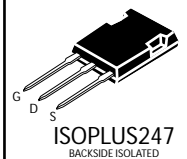
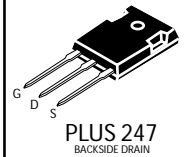
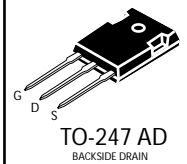
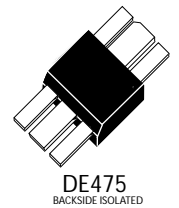
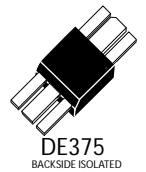
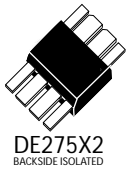
DE275X2-501N16A	500	16	96	11	0.38	2	1800	150	45	1180	DE275x2
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### 1000v (BV<sub>DSS</sub>)

DE150-102N02A	1000	2	12	2	7.8	4	500	150	3	200	DE150
DE275-102N06A	1000	8	48	7.5	1.6	2	1800	130	25	590	DE275
DE375-102N10A	1000	10	60	18	1.2	3	2900	100	25	940	DE375
DE375-102N12A	1000	12	72	11	0.95	3	2000	150	30	940	DE375
DE475-102N20A	1000	20	120	18	0.6	5	5600	175	50	1800	DE475
DE475-102N21A	1000	24	144	27	0.41	5	5500	200	60	1800	DE475

### 1000v (BV<sub>DSS</sub>) Push-Pull Configuration

DE275X2-102N06A	1000	8	48	7.5	1.6	2	1800	130	25	1180	DE275x2
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## F SERIES

### 200v (BV<sub>DSS</sub>)

Part Number	BVDSS	ID (A)	IDM (A)	gfs (S)	RDS(ON)	TR(ns)	CISS (pF)	COSS (pF)	CRSS (pF)	PD(W)	Package
IXFH60N20F	200	60	240	26	0.038	15	2930	940	320	315	TO-247 AD

### 500v (BV<sub>DSS</sub>)

IXFH12N50F	500	12	48	10	0.4	11	1870	290	90	180	TO-247 AD
IXFH21N50F	500	21	84	17	0.25	16	2600	470	160	300	TO-247 AD
IXFH28N50F	500	28	112	18	0.19	15	3000	500	130	315	TO-247 AD
IXFX44N50F	500	44	176	32	0.12	23	5500	990	330	500	PLUS247
IXFX55N50F	500	55	220	33	0.085	34	6700	1250	330	560	PLUS247
IXFR55N50F	500	47	220	33	0.085	24	6700	1250	330	400	ISOPLUS247

### 1000v (BV<sub>DSS</sub>)

IXFH6N100F	1000	6	24	5.5	1.9	14	1870	190	60	180	TO-247 AD
IXFR12N100F	1000	10	40	12	1.05	12	2700	305	93	250	ISOPLUS247
IXFR10N100F	1000	9	36	12	1.2	12	2700	305	93	250	ISOPLUS247
IXFH12N100F	1000	12	48	12	1.05	12	2700	305	93	300	TO-247 AD
IXFX21N100F	1000	21	84	32	0.5	21	5500	640	190	500	PLUS247