

Mfrs. List No.	Order Code	1+	25+	100+	250+	+
PH2520U.	SMD 756-4244	168.00	101.00	87.00	83.00	--
PH2925U.	756-4252	168.00	101.00	87.00	83.00	--
PH3230S..	756-4260	162.00	98.00	84.00	80.00	--
PH3830L.	756-4279	156.00	94.00	81.00	77.00	--
PH7030L.	756-4287	103.00	62.00	54.00	51.00	--
PH8230E.	756-4295	98.00	59.00	51.00	48.00	--

FlipFET™ P Channel HEXFET



- Ultra low R_{DS} per footprint area
- Low thermal resistance
- One third footprint of SOT-23
- Super low profile (less than 0.8 mm)



H=1.524, W=1.524, D=0.537

The FlipFET™ package, is one-third the footprint of a comparable SOT-23 package. Has a profile of less than .8mm. Combined with the low thermal resistance of the die level device, this makes the FlipFET™ desirable for applications where printed circuit board space is at a premium. Due to the low-profile the device is ideal for thin application environments such as battery packs, cell phones and PCMCIA cards.

V _{DSS} V	P _D W	R _{DS} mΩ	I _D A	I _{DM} A	Mfrs. List No.
-20	2.2	65	5.1*	35	IRF6100PBF

* = repetitive rating; pulse width limited by max. junction temperature, V_{GS} = 4.5 V

419386

Mfrs. List No.	Order Code	1+	25+	100+	250+
IRF6100PBF	107-8406	44.00	32.00	25.00	21.00

DirectFET™ MOSFETS



- 1.4°C/W junction to case thermal resistance enable effective top-side cooling
- Less than 1°C/W R_{th(junction-pcb)} in same footprint as SO-8
- Over 90% lower die-free package resistance than SO-8
- 0.7mm profile compared with 1.75mm for SO-8
- Up to 50°C lower operating temperature increases reliability



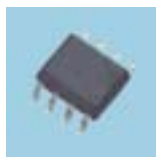
The DirectFET power package is a breakthrough surface-mount power MOSFET packaging technology. It has the footprint of an SO-8 package and a profile of only 0.7mm. A benefit of this package is the bottom side cooling which is designed to reduce the part count and therefore the board space used by as much as 50% compared with standard SO-8 packages. This means a higher current density and lower total system cost. Both conduction and switching losses are also reduced due to low resistance, low charge and ultra-low package inductance. This range of MOSFETs are suitable for a number of applications including high-efficiency DC-to-DC converters, synchronous rectification and CTRL FET notebooks and desktops.

V _{DS} V	R _{DS(on)} @ V _{GS} = 10V mΩ	I _{D cont} @ 25°C A	I _D pulsed A	V _{GS(th)} min. V	P _D @ 25°C W	Package Type	Mfrs. List No.
20	1.65	24	240		2.8	MX	IRF6619TR1
20	1.65	30	240		2.8	MX	IRF6619
20	1.8	32	260		2.8	MT	IRF6691TR1
20	2.0	150	250	1.55	2.8	MT	IRF6609TR1
20	2.7	150	220	1.55	2.8	MX	IRF6620TR1
20	3.2	18	140		2.2	ST	IRF6636TR1
20	4.1	16	132		2.3	MP	IRF6633TR1
20	4.1	16	132		2.3	MP	IRF6633
20	5.7	55	120	1.3	2.1	ST	IRF6623TR1
20	8.2	12	120		2.2	SQ	IRF6610TR1
30	1.3	25	250		2.8	MX	IRF6635TR1
30	1.7	30	240		2.8	MX	IRF6678TR1
30	2	32	220		3.9	MX	IRF6611TR1
30	2.2	170	240	1.35	2.8	MX	IRF6618TR1
30	3.3	24	190		2.8	MX	IRF6612TR1
30	3.4	92	200	1.4	3.6	MT	IRF6603TR1
30	4	16	16		2.2	ST	IRF6626TR1
30	4.4	95	220	1.3	2.3	MT	IRF6607TR1
30	5.7	14	110		2.3	MP	IRF6637TR1
30	7	12	96		2.2	SQ	IRF6621TR1
30	8.1	14	120		2.1	ST	IRF6617TR1
30	9.0	55	100	1.0	2.1	ST	IRF6608TR1
30	11.5	59	92	1.0	2.3	MQ	IRF6604TR1
40	4.6	19	150		2.8	MX	IRF6616TR1
40	3.4	23	180		2.8	MT	IRF6613TR1
60	5.5	86	260		2.8	MN	IRF6648TR1
80	7.6	12	96		2.8	MN	IRF6646TR1
40	8.3	55	102	1.35	2.1	ST	IRF6614TR1
100	10.3	10.3	82		2.8	MN	IRF6644TR1
100	53	19	34		2.2	SH	IRF6665TR1
100	62	19	34		2.8	SH	IRF6655TR1

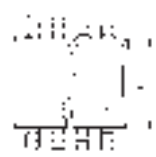
405796

Mfrs. List No.	Order Code	1+	25+	100+	+	+
IRF6619	SMD 107-6299	146.00	104.00	85.00	77.00	--
IRF6633	SMD 107-6300	114.00	82.00	62.00	54.00	--
IRF6603TR1	SMD 926-6526	170.00	122.00	93.00	80.00	--
IRF6604TR1	SMD 926-6534	121.00	86.00	66.00	57.00	--
IRF6607TR1	SMD 926-6542	180.00	129.00	98.00	85.00	--
IRF6608TR1	SMD 926-6550	121.00	86.00	66.00	57.00	--
IRF6609TR1	SMD 926-6569	184.00	132.00	101.00	87.00	--
IRF6610TR1	SMD 107-8407	101.00	73.00	55.00	48.00	--
IRF6611TR1	SMD 107-8408	157.00	112.00	86.00	74.00	--
IRF6612TR1	SMD 107-8411	149.00	107.00	82.00	70.00	--
IRF6613TR1	SMD 107-8412	179.00	128.00	98.00	84.00	--
IRF6614TR1	SMD 926-6577	104.00	75.00	57.00	49.00	--
IRF6616TR1	SMD 107-8413	124.00	89.00	68.00	58.00	--
IRF6617TR1	SMD 107-8414	126.00	90.00	73.00	67.00	--
IRF6618TR1	SMD 926-6585	190.00	136.00	104.00	90.00	--
IRF6619TR1	SMD 107-8415	152.00	109.00	83.00	71.00	--
IRF6620TR1	SMD 926-6593	144.00	104.00	79.00	68.00	--
IRF6621TR1	SMD 107-8416	110.00	79.00	60.00	52.00	--
IRF6623TR1	SMD 926-6607	115.00	82.00	67.00	61.00	--
IRF6626TR1	SMD 107-8417	138.00	99.00	75.00	65.00	--
IRF6633TR1	SMD 107-8418	118.00	85.00	65.00	56.00	--
IRF6635TR1	SMD 107-8419	195.00	140.00	107.00	92.00	--
IRF6636TR1	SMD 107-8420	126.00	91.00	69.00	60.00	--
IRF6637TR1	SMD 107-8421	132.00	95.00	73.00	62.00	--
IRF6644TR1	SMD 107-8423	190.00	136.00	104.00	89.00	--
IRF6646TR1	SMD 107-8424	198.00	142.00	109.00	93.00	--
IRF6655TR1	SMD 926-6615	115.00	82.00	63.00	54.00	--
IRF6665TR1	SMD 107-8425	123.00	88.00	67.00	58.00	--
IRF6678TR1	SMD 107-8426	180.00	129.00	98.00	85.00	--
IRF6691TR1	SMD 107-8427	214.00	153.00	117.00	101.00	--
IRF6648TR1	SMD 108-4634	175.00	126.00	96.00	83.00	--

SO-8



H=1.75, W=6.3, D=5.2



Pin Configurations

	1	2	3	4	5	6	7	8
a	NC	S	S	G	D	D	D	D
b	S	S	S	G	D	D	D	D
c	S1	G1	S2	G2	D2	D2	D1	D1

Single or dual high performance MOSFETs in a space efficient, small outline package.

V _{DS} V	R _{DS(on)} Ω	I _{D cont} @ 25°C A	I _D pulsed A	P _D @ 25°C W	Pin Config.	Mfr.	Mfrs. List No.
Single N-Channel							
20	0.035	6.8	54	2.5	b	IR	IRF7402PBF
20	0.022	8.7	35	2.5	b	IR	IRF7401PBF
20	0.06	5.3	21	2.5	b	IR	IRF7204PBF
30	0.03	7	37	2.5	a	IR	IRF9410PBF
30	0.03	7.3	58	2.5	b	IR	IRF7201PBF
30	0.022	6.7	27	1.6	b	IR	IRF7403PBF
40	7.7	21.2	60	6.25	b	PS	PHK24NQ04LT
30	0.01	12	48	2.5	b	ST	STS12NF30L
30	0.01	12	58	2.5	b	IR	IRF7413PBF
30	0.0078	13	52	2.5	b	INF	BSO4420
30	6.5	23.7	60	6.25	b	PS	PHK28NQ03LT
30	4.4	20	60	3.5	b	PS	PSMN005-30K
40	7.7	21.2	60	6.25	b	PS	PHK24NQ04LT
100	28	11.6	48	8.9	b	PS	PHK12NQ10T
150	75	5	20	6.25	b	PS	PHK5NQ15T
200	130	4	16	6.25	b	PS	PHK4NQ20T
Single P-Channel							
12	0.024	8.7	36	2.5	b	IR	IRF7433.PBF
12	0.014	11.5	46	2.5	b	IR	IRF7420PBF
12	0.007	16	65	2.5	b	IR	IRF7410PBF
20	0.04	5.3	21	1.6	b	IR	IRF7404PBF
20	0.03	7.0	28		b	IR	IRF7331PBF
30	0.25	2.5	10	2.5	a	FCH	NDS9400A
30	0.07	4.6	15	2.5	b	IR	IRF7205
30	0.05	5.3	15	2.5	b	FCH	NDS9435A
30	0.045	5.2	20	1.6	b	IR	IRF7406PBF
30	0.02	8.8	45	2.5	b	IR	IRF7416PBF
30	0.0135	11	47	2.5	b	IR	IRF7424.PBF
40	0.041	6.2	25	2.5	b	IR	IRF7241PBF
Dual N-Channel							
20	0.10	3.5	14	2	c	IR	IRF7101PBF
30	0.08	3.7	15	2	c	FCH	NDS9956A
20	0.05	4.3	17	1.4	c	IR	IRF7301PBF
20	20	10.9	44	4.17	c	PS	PHK6NQ02LT
30	0.1	3.5	16	2	c	IR	IRF9956PBF
30	0.05	4.9	20	2	c	IR	IRF7303PBF
30	0.03	6.7	15	2	c	FCH	NDS8936
50	0.13	3	10	2	c	IR	IRF7103PBF
Dual P-Channel							
20	0.053	4.2	23	1.4	c	IR	IRF7314PBF
30	0.25	2.3	10	2	c	IR	IRF9953PBF
30	0.2	2.9	10	2	c	FCH	NDS9953A
55	0.105	3.4	27	2	c	IR	IRF7342PBF
30	0.1	3	12	1.4	c	IR	IRF7306PBF
30	0.1	4	—	2	c	FCH	NDS8947
30	0.058	4.9	30	2	c	IR	IRF7316PBF
55	0.05	4.7	38	2	c	IR	IRF7341PBF

Semiconductors - Discretes

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Compliant
Non-compliant
RoHS
+ Limited stock - RoHS replacement available