

Power MOSFETs — continued

TO-3



Lead spacing = 11, Fixing centres = 30

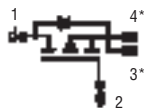
V_{DS} V	N or P Channel	R_{DS} (on) Ω	I_D cont @ 25°C A	I_{DM} Pulsed A	P_D @ 25°C W	Mfr.	Mfrs. List No.
60	N	0.028	30.0	210	150	SEM	IRF044
100	N	0.18	14.0	56	75	IR/INTS	IRF130
100	N	0.085	27.0	108	125	IR	IRF140
100	N	0.055	40.0	160	150	IR	* IRF150
100	P	0.2	19.0	76	125	IR	IRF9140
200	N	0.085	30.0	120	150	IR	* IRF250
200	P	0.8	6.5	26	75	IR	IRF9230
400	N	1.0	5.5	22	75	INTS	IRF330
400	N	0.3	17.0	68	198	SEM	BFD88
500	N	0.85	8.0	32	125	INTS	IRF440
500	N	0.4	14.5	58	198	SEM	BFD82
800	N	2.4	5.0	20	150	SEM	BFD71
1000	N	0.125	6.0	24	198	SEM	BFD63

*Modified TO-3 outline 1.5 dia. pins

SD14

Mfrs. List No.	Order Code	Price Each			
		1+	25+	100+	250+
BFD63	664-145				
BFD71	664-133				
BFD82	664-108				
BFD88	664-091				
IRF044	664-042				
IRF130 (INTS)	301-0958				
IRF130 (IR)	664-054				
IRF140	664-066				
IRF150	664-078				
IRF250	664-080				
IRF330	301-1008				
IRF440	301-1045				
IRF9140	664-110				
IRF9230	664-121				

ISOTOP, SOT-227B – N Channel



Internal schematic diagram

H = 12.2, W = 25.4, D = 38, Fixing centres = 31.6

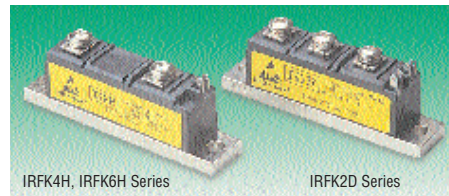
- High power modules
- Isolated base
- 2.5kV rms isolation voltage
- 4mm screw terminals

V_{DS} V	R_{DS} (on) Ω	I_D cont @ 25°C A	I_{DM} pulsed A	P_D @ 25°C W	Mfr.	Mfrs. List No.
60	0.004	250	750	450	ST	STE250N06
100	0.007	180	540	450	ST	STE180N10
100	0.006	180	540	360	ST	STE180NE10
100	0.0055	215	—	460	ON	MTE215N10E
200	0.019	110	440	450	ST	STE110NA20
200	0.011	175	700	700	APT	APT20M11JVR
300	0.019	130	520	700	APT	APT30M19JVR
400	0.035	93	372	700	APT	APT40M35JVR
500	0.13	38	152	400	ST	STE38NB50
500	0.085	53	212	460	ST	STE53NA50
500	0.05	77	308	700	APT	APT50M50JVR
600	0.135	40	160	460	ST	STE40NA60
600	0.075	62	248	700	APT	APT60M75JVR
800	0.15	44	176	700	APT	APT8015JVR
900	0.3	26	104	450	ST	STE26NA90
1000	0.77	15	60	300	ST	STE15NA100
1000	0.385	24	96	450	ST	STE24NA100
1000	0.25	34	136	700	APT	APT10025JVR
1200	0.4	26	—	700	APT	APT12040JVR

SD130

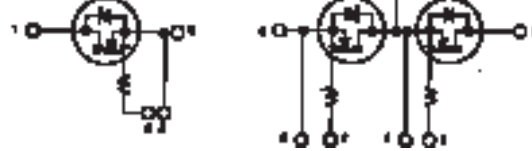
Mfrs. List No.	Order Code	Price Each				
		1+	5+	10+	25+	50+
APT10025JVR	992-628					
APT12040JVR	992-616					
APT20M11JVR	992-689					
APT30M19JVR	992-677					
APT40M35JVR	992-665					
APT50M50JVR	992-653					
APT60M75JVR	992-641					
APT8015JVR	992-630					
MTE215N10E	708-422					
STE15NA100	934-938					
STE24NA100	934-940					
STE26NA90	332-8193					
STE38NB50	332-8181					
STE40NA60	738-980					
STE53NA50	646-003					
STE110NA20	738-967					
STE180N10	274-914					
STE180NE10	332-8480					
STE250N06	526-745					

HEXPAK



H = 37 (incl terminals), W = 92, D = 20, Mounting holes = 6.5 dia, Fixing centres = 80

Equivalent circuits



IRFK4H, IRFK6H Series

IRFK2D Series

HEXPAK Modules contain 4 HEXFET power MOSFET's (IRFK4H and IRFK2D Series) and 6 HEXFET power MOSFET's (IRFK6H Series) on an electrically isolated base plate. They are ideally suited for high power applications where space saving and ease of assembly is important.

V_{DS} V	R_{DS} (on) Ω	I_D cont @ 25°C A	I_{DM} Pulsed A	P_D @ 25°C W	Mfrs. List No.
100	0.014	137	548	500	IRFK4H150
200	0.043	54	216	500	IRFK2D250
200	0.021	108	432	500	IRFK4H250
200	0.015	140	560	625	IRFK6H250
400	0.075	50	200	500	IRFK4H350
500	0.200	22	88	500	IRFK2D450
500	0.100	44	176	500	IRFK4H450
500	0.067	66	264	625	IRFK6H450

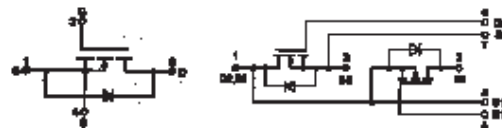
SD58

Mfrs. List No.	Order Code	Price Each		
		1+	4+	10+
IRFK2D250	356-074			
IRFK2D450	356-086			
IRFK4H150	356-098			
IRFK4H250	356-104			
IRFK4H350	356-116			
IRFK4H450	356-128			
IRFK6H250	356-141			
IRFK6H450	356-153			

SEMITRANS Module
N Channel – Single and Dual



A : Single H = 30, W = 80, D = 42 B : Dual H = 30, W = 94, D = 34
Mounting holes = 6.4 dia, Fixing centres = 65



Schematic 1

Schematic 2

- N channel, enhanced mode
- Isolated copper baseplate
- Avalanche characteristics (SKM111xxx, SKM224A)
- Fast inverse diode (SKM181F, SKM284F)
- Short internal connections avoid oscillations (SKM111xxx, built-in gate resistors)
- Switching kW's in less than 1 μ s
- Used with Driver Module, Order Code 663-359, see page 401

	V_{DS} V	$R_{DS(ON)}$ Ω	I_D cont. @ 25°C A	I_{DM} pulsed A	P_D @ 25°C W	Package/ Schematic	Mfrs. List No.
Single	100	0.007	200	600	700	A/1	SKM111AR
	800	0.250	34	136	700	A/1	SKM181F
Dual	800	0.360	20	80	400	B/2	SKM284F

SD256

Mfrs. List No.	Order Code	Price Each		
		1+	25+	100+
SKM111AR	663-360			
SKM181F	663-384			
SKM284F	663-402			