

Highly efficient power supply circuits can be achieved by combining Renesas Electronics IGBTs and PFC controllers. Renesas supplies ultra-compact, high-performance IGBTs for built-in flash units



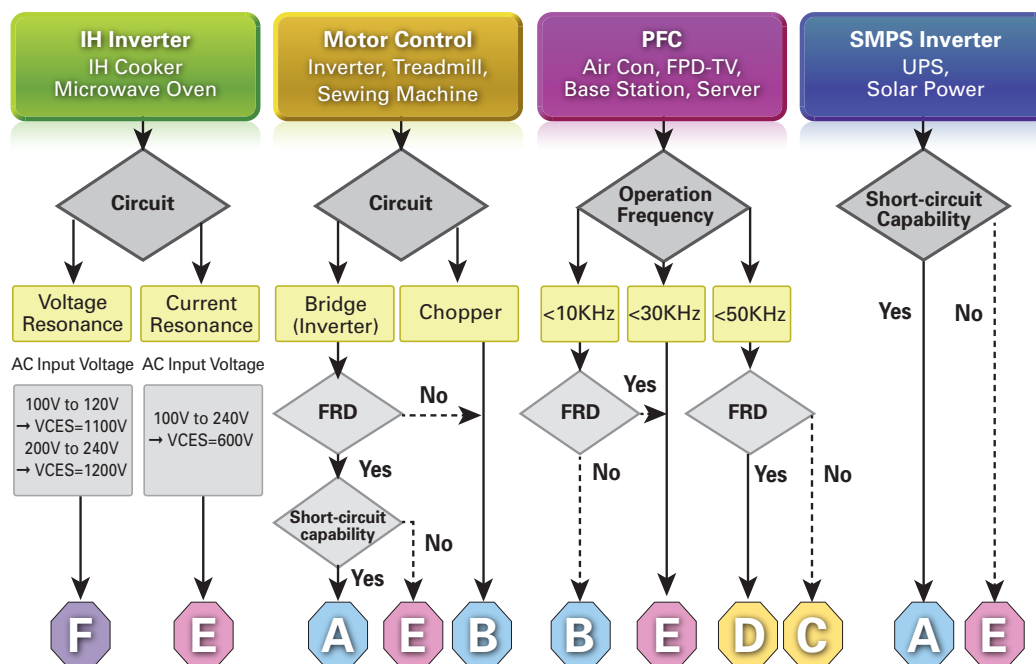
Key Features and Target Applications

- RJH608 series for > 3 kW PFC applications
- Ultra-low $V_{ce(sat)}$ RJH60F series for soft switching and induction heating applications

- Up to 8μs Short-circuit Capable
RJH608M series for industrial
motor drives
- Gate-emitter ratings up to +/- 30V
- Low emitter leakage currents

Non FRD (Fast-recovery Diode) RJP60x series for chopper applications

Step 1: Follow the Application and Circuit Specific Flow Chart



A, B – F : Recommended IGBTs *See Other Side for Part Numbers*

IGBT Products

Selection Process - (Continued)

Step 2: Select Suitable IGBT from Table

Features	Gr		VCES	IC (A)		Package	FRD *	IGBT					FRD		
				Tc				Y:built :- Non	VCE(sat)	typ.	tf typ. (Inductive Load)	tsc **		VF typ	
				(V)	25°C				100°C	(V)	Condition Ic (A)	(ns)		Conditions Ic (A)	(us)
High-destruction capability, Low VCE(Sat)	A	RJH60D1DPP-M0	600	20	10	TO-220FL	Y	1.9	10	90	10	5	1.4		
		RJH60D1DPE		20	10	LDBAK-S	Y	1.9	10	90	10	5	1.4		
		RJH60D2DPP-M0		25	12	TO-220FL	Y	1.7	12	80	12	5	1.2		
		RJH60D2DPE		25	12	LDBAK-S	Y	1.7	12	80	12	5	1.2		
		RJH60D3DPP-M0		35	17	TO-220FL	Y	1.6	17	80	17	5	1.3		
		RJH60D3DPE		35	17	LDBAK-S	Y	1.6	17	80	17	5	1.3		
		RJH60D0DPK		45	22	TO-3P	Y	1.6	22	70	22	5	1.4		
		RJH60D0DPM		45	22	TO-3PFM	Y	1.6	22	70	22	5	1.4		
		RJH60D5DPK		75	37	TO-3P	Y	1.6	37	50	37	5	1.4		
		RJH60D5DPM		75	37	TO-3PFM	Y	1.6	37	50	37	5	1.4		
		RJH60D6DPK		80	40	TO-3P	Y	1.6	40	50	40	5	1.4		
		RJH60D6DPM		80	40	TO-3PFM	Y	1.6	40	50	40	5	1.4		
	B	RJH60D7DPK		90	50	TO-3P	Y	1.6	50	50	50	5	1.4		
		RJH60D7DPM		90	50	TO-3PFM	Y	1.6	50	50	50	5	1.4		
		RJP60F0DPE		50	25	LDBAK-S	—	1.4	25	90	30	—	1.6		
		RJP60D3DPK-M0		35	17	TO-3PSG	—	1.6	17	80	17	5	—		
		RJP60D0DPP-M0		45	22	TO-220FL	—	1.6	22	70	22	5	—		
		RJP60D0DPE		45	22	LDBAK-S	—	1.6	22	70	22	5	—		
		RJP60D0DPM		45	22	TO-3PFM	—	1.6	22	70	22	5	—		
		RJP60D0DPK		45	22	TO-3P	—	1.6	22	70	22	5	—		
		C		RJP60S5DPN	40	-	TO-220AB	—	2.65	40	40	40	—	—	
				RJP60S5DPK	40	-	TO-3P	—	2.65	40	40	40	—	—	
				RJH60S5BDPK	40	-	TO-3P	Y	3	40	40	40	—	—	
				D	RJH60S6BDPK	45	-	TO-3P	Y	3.4	45	45	40	—	—
					RJH60S7BDPK	50	-	TO-3P	Y	3.5	50	50	40	—	—
					RJH60S8BDPK	60	-	TO-3P	Y	3.5	60	60	40	—	—
Very high-speed switching	RJH60F3DPK	40	20		TO-3P	Y	1.4	20	80	30	—	1.6			
	RJH60F3DPQ-A0	40	20	TO-247	Y	1.4	20	80	30	—	1.6				
	RJH60F0DPK	50	25	TO-3P	Y	1.4	25	90	30	—	1.6				
	RJH60F0DPQ-A0	50	25	TO-247	Y	1.4	25	90	30	—	1.6				
	RJH60F4DPK	60	30	TO-3P	Y	1.4	30	80	30	—	1.6				
	RJH60F4DPQ-A0	60	30	TO-247	Y	1.4	30	80	30	—	1.6				
	RJH60F5DPK	80	40	TO-3P	Y	1.37	40	80	30	—	1.6				
	RJH60F5DPQ-A0	80	40	TO-247	Y	1.37	40	80	30	—	1.6				
	RJH60F6DPK	85	45	TO-3P	Y	1.35	45	95	30	—	1.6				
	RJH60F6DPQ-A0	85	45	TO-247	Y	1.35	45	95	30	—	1.6				
	RJH60F7ADPK	90	50	TO-3P	Y	1.35	50	95	30	—	1.6				
	RJH60F7DPQ-A0	90	50	TO-247	Y	1.35	50	95	30	—	1.6				
High-speed switching, Low VCE(sat)	E	600	RJH1BF6RDPQ-80	55	30	TO-247	Y	1.6	30	(100)	30	—	3		
			RJH1BF7RDPQ-80	60	35	TO-247	Y	1.7	35	(100)	35	—	3		
			RJH1CF4RDPQ-80	40	20	TO-247	Y	2	20	(100)	20	—	4.2		
			RJH1CF5RDPQ-80	50	25	TO-247	Y	1.95	25	(100)	25	—	4.2		
			RJH1CF6RDPQ-80	55	30	TO-247	Y	1.8	30	(100)	30	—	3		
			RJH1CF7RDPQ-80	60	35	TO-247	Y	1.85	35	(100)	35	—	3		
			RJH1DF7RDPQ-80	1350	60	35	TO-247	Y	1.95	35	(100)	35	—	3.4	
			High Voltage	F	1100	RJH1BF6RDPQ-80	55	30	TO-247	Y	1.6	30	(100)	30	—
RJH1BF7RDPQ-80	60	35				TO-247	Y	1.7	35	(100)	35	—	3		
RJH1CF4RDPQ-80	40	20				TO-247	Y	2	20	(100)	20	—	4.2		
RJH1CF5RDPQ-80	50	25				TO-247	Y	1.95	25	(100)	25	—	4.2		
1200	RJH1CF6RDPQ-80	55			30	TO-247	Y	1.8	30	(100)	30	—	3		
	RJH1CF7RDPQ-80	60			35	TO-247	Y	1.85	35	(100)	35	—	3		
	1350	RJH1DF7RDPQ-80			1350	60	35	TO-247	Y	1.95	35	(100)	35	—	3.4

Remarks : (): Tentative value, - signifies N/A, *FRD: Y signifies built-in FRD

Support and Collateral

<http://am.renesas.com/products/discrete/>

Sales Support

<http://am.renesas.com/contact>



LDBAK-S



TO-3P
TO-3PSG



TO-220AB



TO-247

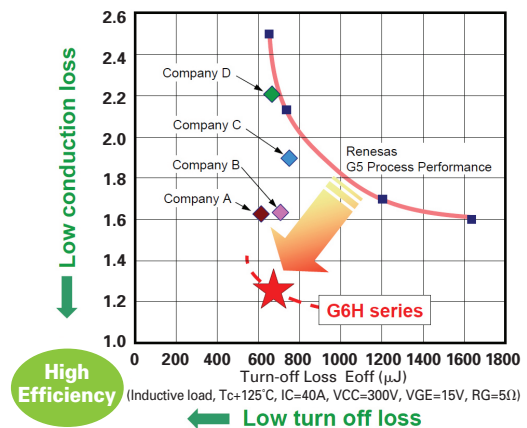
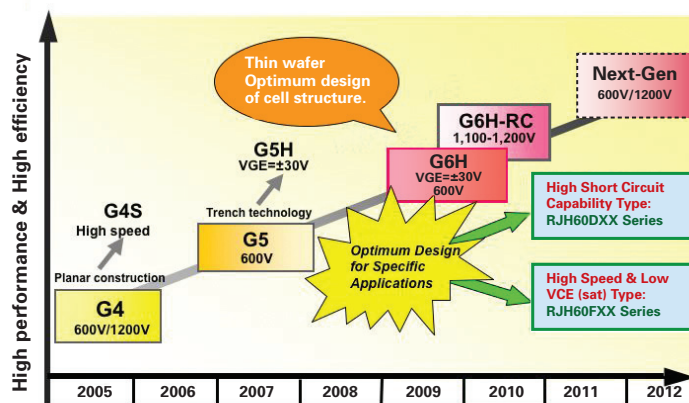


TO-220FL



TO-3PFM

Development Roadmap and Trends



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