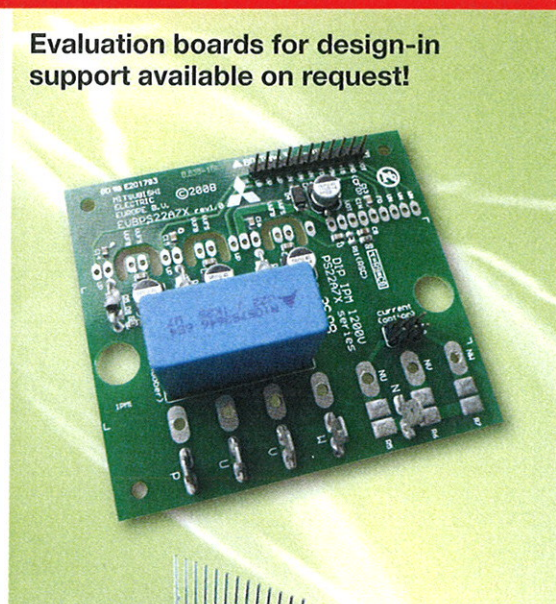


Transfer Mold Intelligent Power Modules



Evaluation boards for design-in support available on request!

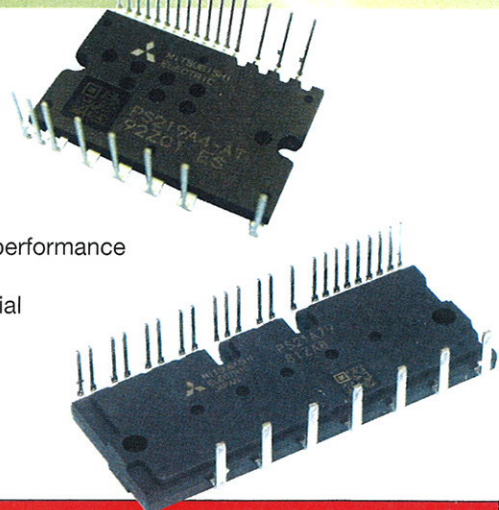


Applications

Home Appliances (washing machines, refrigerators, air conditioners)
Low Power Industrial Drives (e.g. pump, fan application)

Features

- Latest generations with CSTBT™ / full gate CSTBT™ technology with superior loss performance
- Including LV/HVIC driver and protection circuitry (UV, SC)
- DIPIPM™ with reduction of thermal resistance by 20% by innovative insulation material
- 1500V_{rms} (Super Mini-DIPIPM) & 2500V_{rms} ((Mini-)DIPIPM) isolation voltage
- Highest reliability and optimized EMI performance
- For motor ratings from 0.1kW to 5.5kW
- Optional with open emitter technology for vector control
- All modules are entirely RoHS compliant



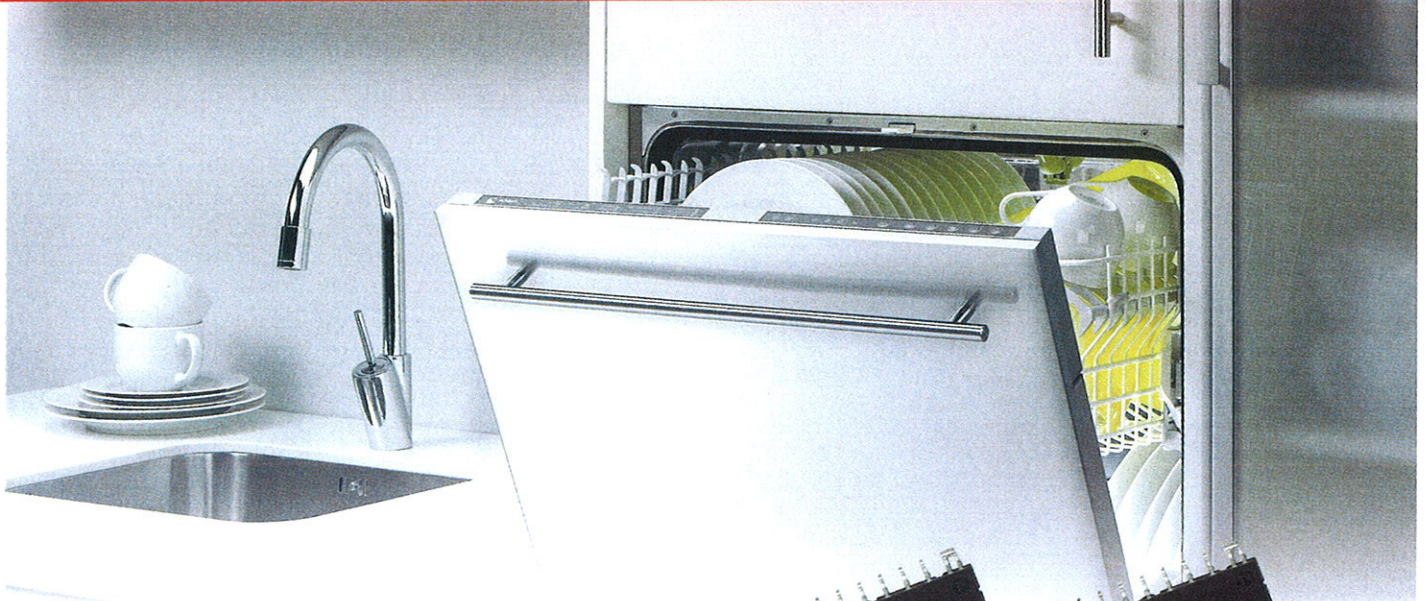
Line-up Super Mini-DIPIPM™, Mini-DIPIPM™, DIPIPM™, SIPIPM™

V _{CEs} (V)	Isolation Voltage (V _{rms})	Series	I _c (A)								
			3	5	8	10	15	20	30	50	75
			Motor Rating (kW)								
			0.1	0.2	0.3	0.4	0.75	1.5	2.5	4.0	5.5
600	1500	Super Mini-DIPIPM Ver. 4 ¹⁾	PS21961-4/-T/-S ²⁾	PS21962-4/-T/-S	PS21963-4E/-ET/-ES PS21993-4E/-ET ³⁾	PS21963-4/-T/-S PS21993-4/-T ³⁾	PS21964-4/-T/-S PS21994-4/-T ³⁾	PS21965-4/-T/-S	PS21997-4/-T ³⁾		
	1500	Super Mini-DIPIPM Ver. 4 Built-in Bootstrap Diodes	NEW	PS219A2 PS219A2-T	PS219A3-E PS219A3-ET	PS219A3 PS219A3-T	PS219A4 PS219A4-T				
	2500	DIPPS Built-in partial SW Circuit	NEW		PS81B93-AE, -EW	PS81B93-A, -W	PS81B94-A, -W	PS81B95-A, -W			
	2500	Mini-DIPIPM Ver. 4						PS21765	PS21767-V		
	2500	Large DIPIPM Ver. 4	NEW							PS21A79	PS21A7A
	2500	DIPPSFC	NEW						PS51787	PS51789	
	2500	Large DIPIPM Open Emitter						PS21065	PS21067	PS21069	
	2500	Mini-DIPIPM Ver. 3		PS21562-P/-SP		PS21563-P/-SP	PS21564-P/-SP	PS21565-P/-SP			
	2500	Large DIPIPM Ver. 3								PS21869-P/-AP	
	2500	Large DIPIPM Ver. 3.5						PS21265-P/-AP	PS21267-P/-AP		
2500	SIPIPM		PS21661-RZ/-FR								

V _{CEs} (V)	Isolation Voltage (V _{rms})	Series	I _c (A)						
			3	5	10	15	25	35	50
			Motor Rating (kW)						
			2.2	0.7	1.5	2.2	3.7	5.5	
1200	2500	DIPIPM Ver. 4	NEW	PS22A72	PS22A73	PS22A74	PS22A76	PS22A78-E	under consideration

Description: -E: 8A device / -S: N-side open Emitter / -A: Long pin type / -C: Zigzag pin type / -W: Both sides zigzag pin type / -P: Pb-free / -T: Temperature on LVIC measured / -V: Fast switching type
Remarks: ¹⁾ Available in Short-, Long-, Zigzag-, Both sides zigzag pin type ²⁾ With RC-IGBT Technology ³⁾ Lower loss full gate CSTBT

Single Chip Inverter (M81500FP)

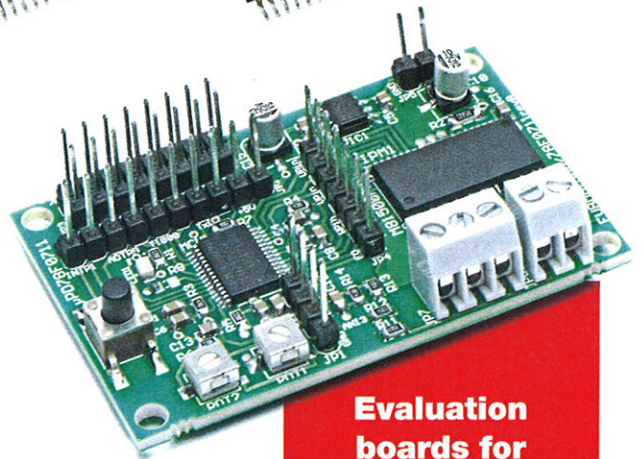
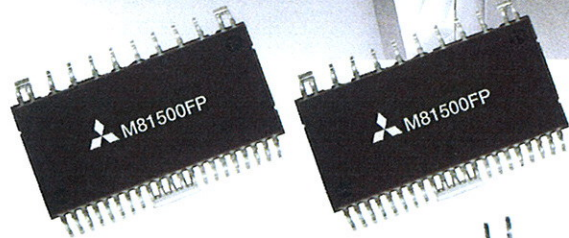


Applications

Dish Washers – Compressors for Refrigerator
Small Pumps for Heating

Features

- Smallest IPM in the world (17.5 x 11.93mm) for drive range of typically 90W reducing the PCB size
- A single silicon chip integrating control, driver, protection functions (under voltage, interlock, short circuit, over temperature) with IGBTs, free-wheeling diode and bootstrap diodes
- Single supply voltage of 15V, control input 3V compatible
- Open drain fault output (FO)
- Excellent short circuit robustness
- Very first SMD package on the market for single chip inverter concept simplifying the production process
- Terminal shapes optimized for better thermal contact to the PCB
- Available rating: 1A/500V
- Evaluation-board (EVBM81500FP) for easy evaluation available



Evaluation boards for design-in support available on request!

Single Chip Inverter Block Diagram

