

T-33-35

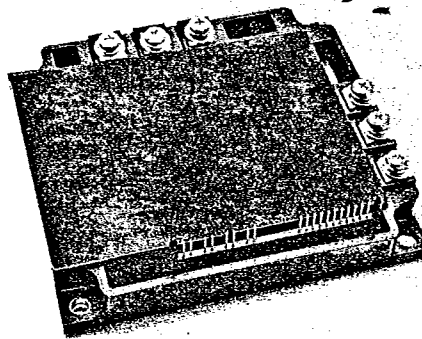
FUJI
ELECTRIC

IPM

IPM

**Intelligent
Power
Modules**

600V
1200V



IPM advantages:

- Simplify controller design
- Shorten development time

IPMs are used in:

- Servo systems
- General-purpose drives
- Heat pump/compressor drives

IPMs are designed for:

- 240VAC (600V) systems
- 480VAC (1200V) systems (1992)
- Current ranges from 10A to 150A
- Typical switching frequencies of 1kHz (BJT) to 20kHz (IGBT)

Fuji's Intelligent Power Modules are state-of-the-art power electronics. A complete output section, in the form of a 3-phase inverter (six transistors) and a shunt regulator (one transistor), is included. Users need provide only four floating power supplies (9.5V at 100mA). Base (gate) drive, isolation, protection and diagnostics are included. The IPM is self-protected against over-current and over-temperature.

Intelligent Power Modules

FUJI Semiconductors • Imported and Distributed by
Collmer Semiconductor, Inc.

14368 PROTON RD • DALLAS, TEXAS 75244 • 214/233-1589
 FAX 214/233-0481

IPM Intelligent Power Modules

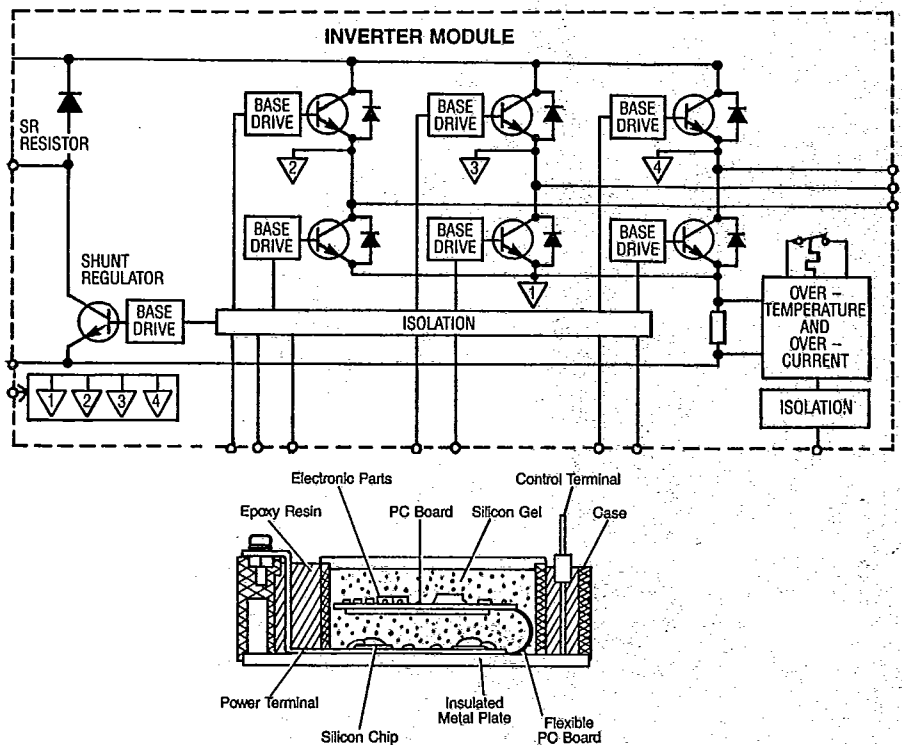
T-33-35

COLLMER SEMICONDUCTOR INC 34E D ■ 2238792 0001566-2 ■ COL

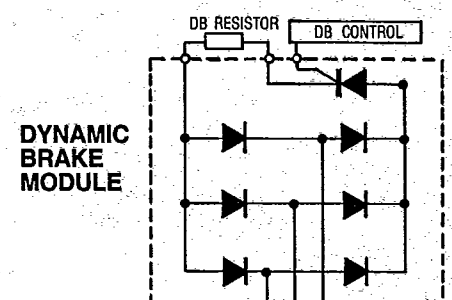
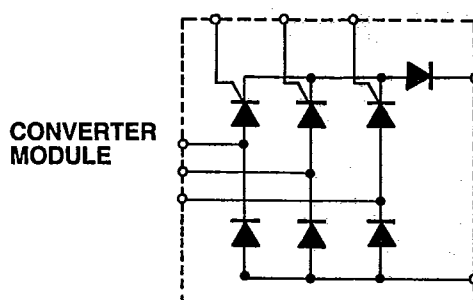
Type	Part Number	Power Transistor									Pre-Driver	Over-Heating Protection	Over-Current Protection	Alarm Output	Pkg.		
		Inverter						Shunt Regulator									
		V _{CC} (V)	I _C (A)	P _C (W)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)	V _{CC} (V)	I _C (A)	P _C (W)						V _{gd} (V)	I _{pd} (mA)
BJT	6D10A-050EJR	450	10	40	3	10	2	-	-	-	10	200	90	15	50	10-30	1
	6D15A-050EJR	450	15	60	3	10	2	-	-	-	10	200	90	23	50	10-30	1
	6D20A-050EJR	450	20	80	3	10	2	-	-	-	10	200	90	30	50	10-30	1
BJT	7D30A-050EHR	450	30	150	8	13	3	450	20	100	9	200	90	45	50	10-30	2
	7D50A-050EHR	450	50	200	8	13	3	450	20	100	9	200	90	75	50	10-30	2
	7D75A-050EHR	450	75	240	8	13	3	450	20	100	9	200	90	113	50	10-30	2
	7D100A-050EHR	450	100	350	8	15	3	450	50	150	9	200	90	150	50	10-30	3
	7D150A-050EHR	450	150	400	8	15	3	450	50	150	9	200	90	225	50	10-30	3
IGBT	7MB30A-050EHR	450	30	150	6	6	1	450	20	100	15	30	90	45	20	10-30	NEW
	7MB50A-050EHR	450	50	200	6	6	1	450	20	100	15	30	90	75	20	10-30	NEW
	7MB75A-050EHR	450	75	240	6	6	1	450	20	100	15	30	90	113	20	10-30	NEW

INTEGRATED FUNCTIONS

Functions	Components or Circuits	No
Power Devices	Power Transistors for Inverter	6
	Fast-Recovery Diodes for Free Wheeling	6
	Power Transistor for DC Link Dynamic Brake	1
	Snubber Diode for DC Link Dynamic Brake	1
Base Drive	Forward Base Drive Circuit	7
	Reverse Base Drive Circuit	7
Sensor	Current Sensor	1
	Temperature Sensor	3
Isolation	Opto-Coupler	8
Power Supply	Reverse Base Drive Power Supply	4
	Series Regulator For Logic Circuits	1
Protection	Over-Current Trip Circuit	1
	Over-Heating Trip Circuit	1
Self Diagnosis	Alarm Signal Output and Latch Circuit	1
	Self-Reset Circuit	1



CONVERTER AND DYNAMIC BRAKE MODULES			
Part Number	V _{RRM} (V)	I _{O(AV)} (A)	PKG
4R3T120Y-080	800	20	4
4R3T130Y-080	800	30	4
4R3T160Y-080	800	60	4
6R1T130Y-080	800	30	4



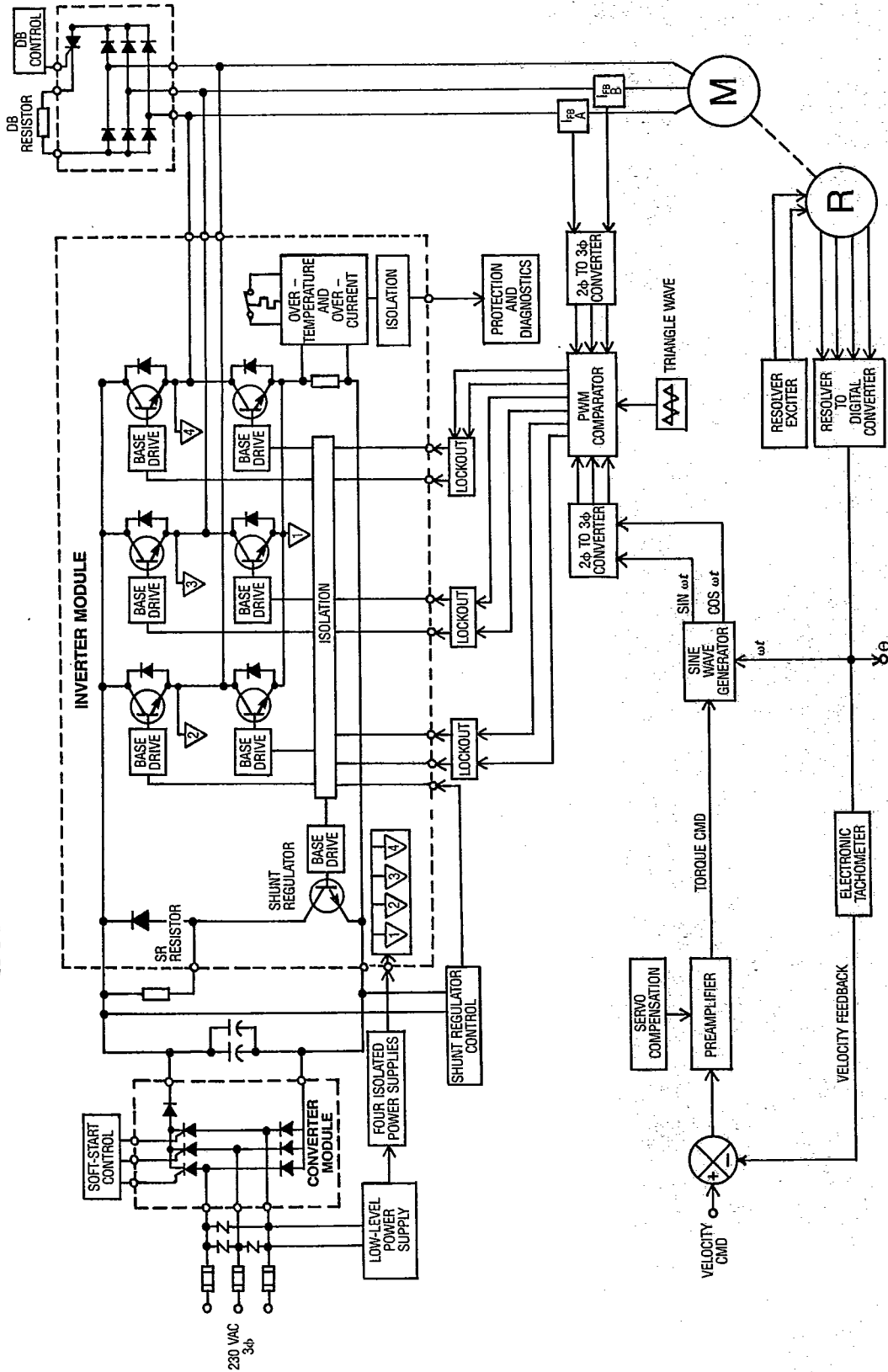
FUJII Semiconductors • Imported and Distributed by

Collmer Semiconductor, Inc.



IPM

INTELLIGENT POWER MODULE



PM SYNCHRONOUS AC MOTOR CONTROLLER
(ONE OF MANY IMPLEMENTATIONS)

FUJICOLLMER

Intelligent Power Modules

FUJI Semiconductors • Imported and Distributed by

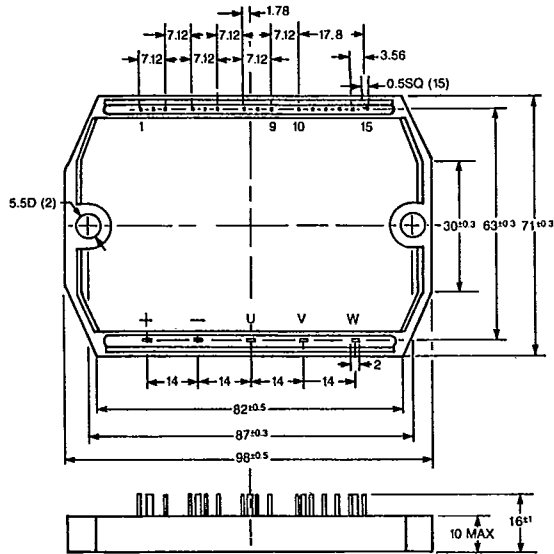
Collmer Semiconductor, Inc.

14368 PROTON RD • DALLAS, TEXAS 75244 • 214/233-1589

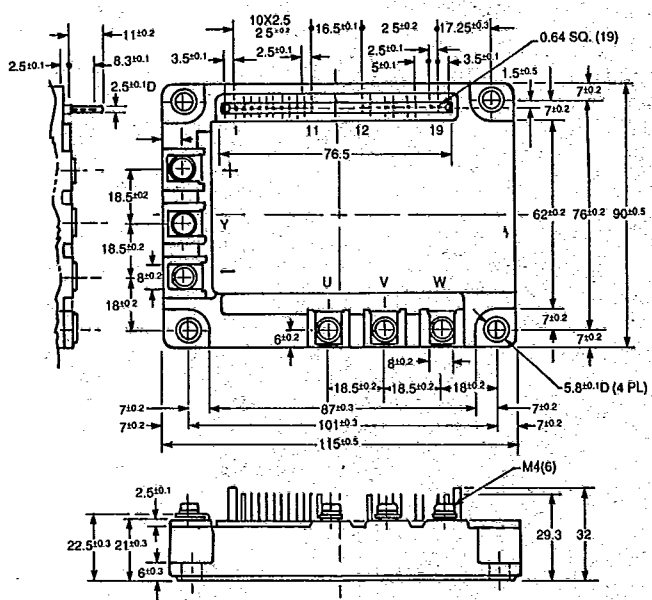


OUTLINE DRAWINGS

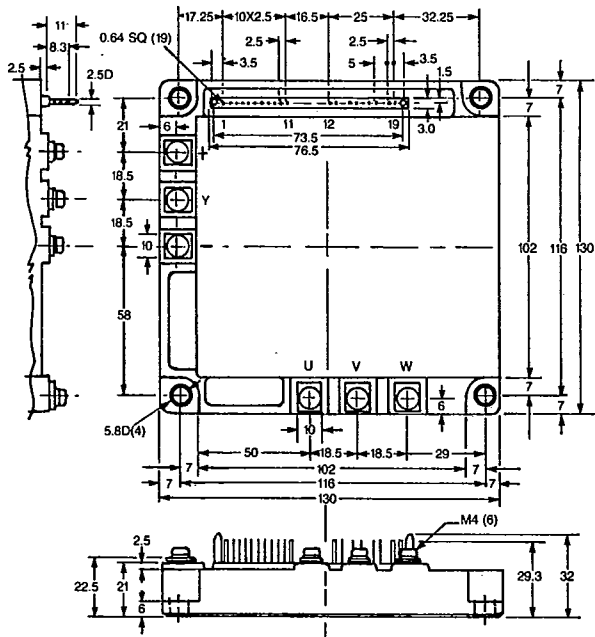
DIMENSIONS IN MILLIMETERS



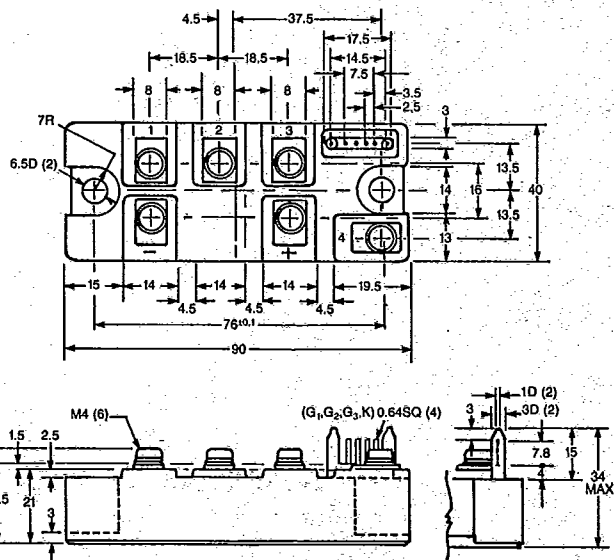
PKG.1



PKG.2



PKG.3



PKG.4

COLLMER SEMICONDUCTOR, INC reserves the right to make changes in these specifications at any time and without notice in order to supply the best product possible