

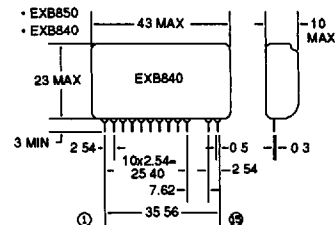
# Power Darlington Modules

T-39-31



## 900 VOLT IGBTs (FOR RESONANT APPLICATIONS)

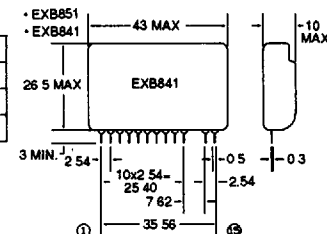
| Device Type | V <sub>ces</sub> Volts (min) | I <sub>c</sub> Amps (min) | R <sub>th(j-c)</sub> °C/Watts (max) | V <sub>ce(th)</sub> Volts (max) | V <sub>ce(sat)</sub> Volts (max) | t <sub>fl</sub> μs (max) | t <sub>f2</sub> μs (max) | Package |
|-------------|------------------------------|---------------------------|-------------------------------------|---------------------------------|----------------------------------|--------------------------|--------------------------|---------|
| IMB50-090A  | 900                          | 50                        | 0.83                                | 6                               | 3.6                              | 0.5                      | 1.0                      | T03P    |
| MBT001      | 900                          | 60                        | 0.41                                | 6                               | 4.0                              | 0.5                      | 1.0                      | T03PL   |



## IGBT GATE DRIVERS

| IGBT            | 600 V IGBT drive |            | 1200 V IGBT drive |            |
|-----------------|------------------|------------|-------------------|------------|
|                 | Up to 150A       | Up to 400A | Up to 75A         | Up to 300A |
| Standard type   | EXB850           | EXB851     | EXB850            | EXB851     |
| High-speed type | EXB840           | EXB841     | EXB840            | EXB841     |

Notes: 1. Standard type: Signal delay in drive circuit; Up to 4 μs  
 2. High-speed type: Signal delay in drive circuit; Up to 1 μs



## INTELLIGENT POWER MODULES (IPM)

### GENERAL DESCRIPTION

Fuji has recently introduced Smart Power, Intelligent Power Modules (IPM) for motor controllers. The modules integrate: power electronics, base drive, protection and isolation into one package.

IPMs are designed for 230VAC, 3-phase operation with current ranges from 10A to 150A. Packages contain either six or seven switching devices. Compatible soft start converters and dynamic break modules are also available.

### BENEFITS

- Reduce design time.
- Isolated signal inputs.
- No base drive design required.
- Logic level controllable.

### FEATURES

- Overcurrent protection.
- Overtemperature protection.
- Diagnostic output.
- Shunt regulator.

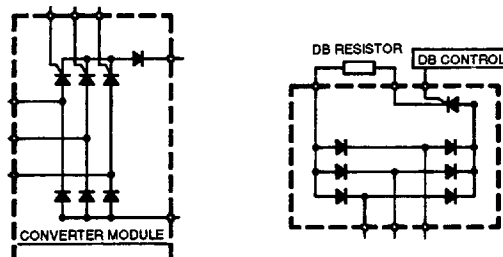
### SELECTION GUIDE

| Device Type   | V <sub>CC</sub> Volts (Max) | I <sub>C</sub> Amps | P <sub>C</sub> Watts (Per Transistor) |
|---------------|-----------------------------|---------------------|---------------------------------------|
| 6D10A-050EJR  | 450                         | 10                  | 40                                    |
| 6D15A-050EJR  | 450                         | 15                  | 60                                    |
| 6D20A-050EJR  | 450                         | 20                  | 80                                    |
| 7D30A-050EHR  | 450                         | 30                  | 150                                   |
| 7D50A-050EHR  | 450                         | 50                  | 200                                   |
| 7D75A-050EHR  | 450                         | 75                  | 240                                   |
| 7D100A-050EHR | 450                         | 100                 | 350                                   |
| 7D150A-050EHR | 450                         | 150                 | 400                                   |

## Converter and Dynamic Brake Modules Designed to be used with the IPM.

### SELECTION GUIDE

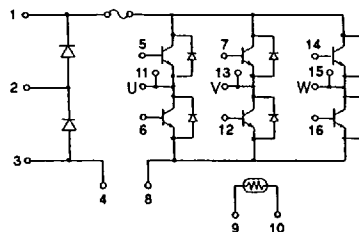
| Device Type  | V <sub>RRM</sub> Volts | I <sub>o</sub> (AV) Amps |
|--------------|------------------------|--------------------------|
| 4R3T120Y-080 | 800                    | 20                       |
| 4R3T130Y-080 | 800                    | 30                       |
| 4R3T160Y-080 | 800                    | 60                       |
| 6R1T130Y-080 | 800                    | 30                       |



## Inverter Modules

### SELECTION GUIDE

| Device Type    | V <sub>ceo</sub> Volts | I <sub>c</sub> Amps | P <sub>c</sub> Watts |
|----------------|------------------------|---------------------|----------------------|
| 2R6D15A-050AJV | 600                    | 15                  | 60                   |
| 2R6D20A-050AJV | 600                    | 20                  | 80                   |



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