



INTELLIGENT POWER MODULES

INCLUDES COMPLETE OUTPUT POWER STAGE, GATE DRIVE CIRCUITRY,
AND PROTECTION CIRCUITS IN ONE COMPACT PACKAGE DESIGN

Powerex Intelligent Power Modules incorporate state of the art IGBT technology combined with improved conduction losses and switching times. Time to market is reduced because Powerex IPM'S include gate drive circuitry and protection circuits such as over current, over temperature, short circuit, and gate drive under voltage lockout.

Features & Benefits

- Compact design
- Reduced component count
- Internal protection circuitry
- Reduced noise
- Higher operating frequencies

Applications

- AC Servo
- Air Conditioner
- General Purpose Inverter
- CNC
- AC Motor Control
- Robot
- UPS
- Welding Machine



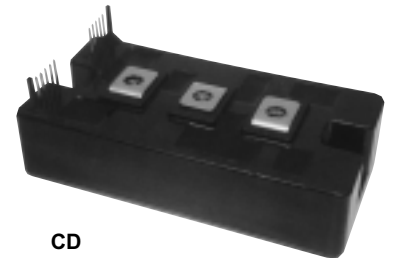
CA



CB



CC



CD



CE

Part #	Description	Package	Price ea.
PM10CSJ060	10A 600V 6-Pack	CA	56.64
PM10CZF120	10A 1200V 6-Pack	CB	91.22
PM150DSA120	150A 1200V Dual	CD	252.07
PM20CSJ060	20A 600V 6-Pack	CA	77.13
PM300DSA120	300A 1200V Dual	CE	481.38
PM30CSJ060	30A 600V 6-Pack	CA	94.88
PM50RSA120	50A 1200V 7-Pack	CC	290.27
PM75CSA120	75A 1200V 6-Pack	CC	412.22

MOUNTING POWER SEMICONDUCTORS

Mounting Surface Prep.

- Surface flatness** in the device mounting surface area should be .001 inch per inch. Generally, commercially extruded heat sinks require spot facing & cast sinks; rough plates, etc. require additional machining to meet the required surface flatness requirements.
- Surface finish** in the device mounting interface area should be equivalent to that of the semiconductor device or 32 microinches maximum for disc & 63 microinches maximum for stud. Finer finishes add undue cost with little or no improvement in thermal performance.
- Care** should be taken in handling devices as well as the heat sinks so as to minimize voids, nicks, deep scratches, & other imperfections in the mounting interface area. While minor scratches, etc. are not desirable, one should realize that surface flatness is much more critical than surface finish in achieving a good thermal interface.
- Treated heat sink finishes** should be removed from the device mounting interface area. Black anodizing or paint on heat sinks **must be removed** from the mounting area. Also, irridite or chromate acid dip finishes must be removed from the mounting area for optimum performance. Nickel & tin-plated finishes are acceptable & even desirable in many applications where corrosion could be a problem.
- Mounting interface areas** should be free of all foreign material, oxides, & films. Since most heat sinks are stored & are not assembled immediately after machining, a cleaning operation is recommended. A satisfactory cleaning technique is to lightly polish the mounting area with a 3M Scotch Brite® pad or No.000 fine steel wool, followed by a Semiconductor Cleaning Solvent wipe. As freshly bared aluminum forms an oxide layer in a matter of seconds, Alcoa #2 electrical joint compound may be used to clean aluminum heat sink mounting surfaces, followed by a Semiconductor Cleaning Solvent wipe. Surface should not be touched after cleaning. Parts may be placed on a lint-free surface until final assembly. After cleaning, an appropriate thermal interface compound should be immediately applied and the semiconductor device attached thereafter to prevent the thermal compound from collecting dust & metal particles.

*In Stock and Ready for Delivery
Prices subject to change without notice*



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