

The GP350MHB06S is a dual switch 600V robust n channel enhancement mode Insulated Gate Bipolar Transistor (IGBT) module. Designed for low power loss and high current capability, the module is suitable for a variety of medium voltage applications in motor drives and power conversion. The high impedance gate simplifies gate drive considerations enabling operation directly from low power control circuitry.

Fast switching times allow high frequency operation making the device suitable for the latest drive designs employing pwm and high frequency switching. The IGBT is fully short circuit rated and has a wide reverse bias safe operating area (RBSOA) for ultimate reliability in demanding applications.

These modules incorporate electrically isolated base plates enabling circuit designers to optimise circuit layouts and utilise earthed heat sinks for safety.

The powerline range of high power modules includes dual and single switch configurations with a range of current and voltage capabilities to match customer system demands.

Typical applications include dc motor drives, ac pwm drives, traction auxiliaries, ups systems and resonant inverters.

### FEATURES

- n - Channel.
- High Input Impedance.
- High Switching Speed.
- Low Forward Voltage Drop.
- Isolated Base.
- Short Circuit Capability (10µs).

### APPLICATIONS

- High Power Switching.
- Motor Control.
- UPS.
- AC And DC Servo Drive Amplifiers.

### KEY PARAMETERS

$V_{CES}$		600V
$V_{CE(sat)}$	(typ)	2.0V
$I_{C25}$	(max)	500A
$I_{C75}$	(max)	350A
$I_{C(PK)}$	(max)	1000A
$t_{sc}$	(max)	10µs

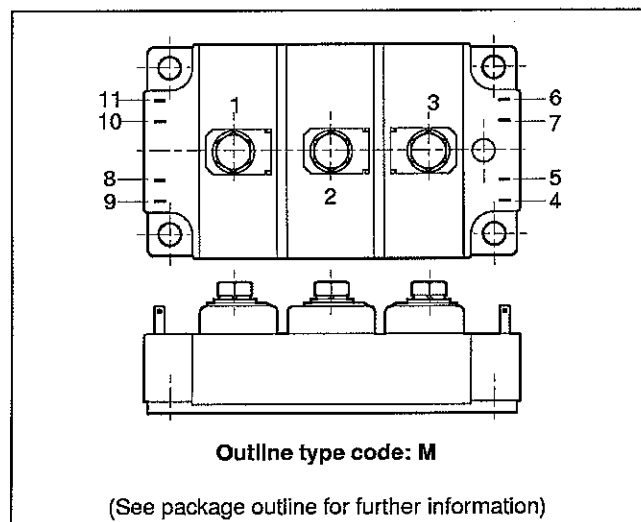


Fig. 1 Electrical connections - (not to scale)

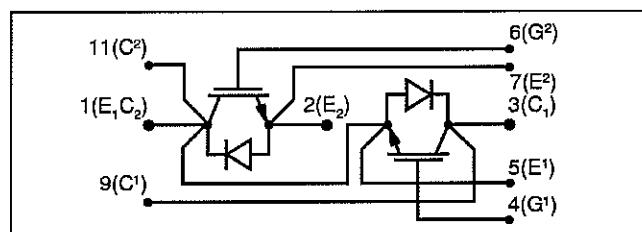


Fig. 2 Half bridge circuit diagram

### ORDERING INFORMATION

GP350MHB06S

Note; When ordering, use complete part number.

**IGBT Power Module**

Click on to remove part from compare.  
 Click on to change reference part.

Value Guide: Better Worse Different

[NEW SEARCH](#)

<b>Part Number:</b>	GP350MHB06S	GP350MHB06S
<b>Description:</b>	TRANSISTOR, IGBT POWER MODULE, HALF BRIDGE, 600V V(BR)CES, 500A I(C)	TRANSISTOR, IGBT POWER MODULE, HALF BRIDGE, 600V V(BR)CES, 500A I(C)
<b>Documents:</b>	<a href="#">Standards Store</a>	<a href="#">Datasheet</a> <a href="#">Standards Store</a>
<b>Material Content Data:</b>		<a href="#">View Material Content Data</a>
<b>Download IPC-1752 XML File:</b>		<a href="#">Class 2</a>
<b>Life Cycle Forecast:</b>	Risk Factor: 6	Risk Factor: 2
<b>QBE Parametric Search:</b>		
<b>Manufacturer:</b>	Mitel Semiconductor	Zarlink Semiconductor
<b># Alternate Manufacturers:</b>	17	17
<b>Superseding Manufacturer:</b>	Zarlink Semiconductor	
<b>Price &amp; Availability:</b>	\$	\$
<b>Buy &amp; Sell:</b>		
<b>Status:</b>	Discontinued	Contact Mfr
<b>IGBT Power Module Type:</b>	Half Bridge IGBT Power Module	Half Bridge IGBT Power Module
<b>Circuits Per Package:</b>	1	1
<b>V(BR)CES (V):</b>	600	600
<b>V(BR)GES (V):</b>	20	20
<b>I(C) Abs.(A) Collector Current:</b>	500	500
<b>Absolute Max. Power Diss. (W):</b>	1.75k	1.75k
<b>I(CES) Max. (A):</b>	12m	12m
<b>I(GES) Max. (A):</b>	1u	1u
<b>V(CE)sat Max (V):</b>	2.6	2.6
<b>Package Style:</b>	M:HL093HW048	M:HL093HW048
<b>RoHS Compliant:</b>	UNDEF	NO
<b>Maximum Operating Temp (C):</b>	150	150