

Glass Passivated Three Phase Rectifier Bridge

Reverse Voltage - 1200 to 1800 Volts
Forward Current - 160 Amperes

Features

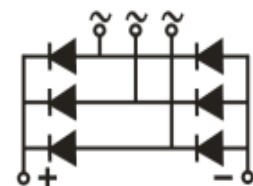
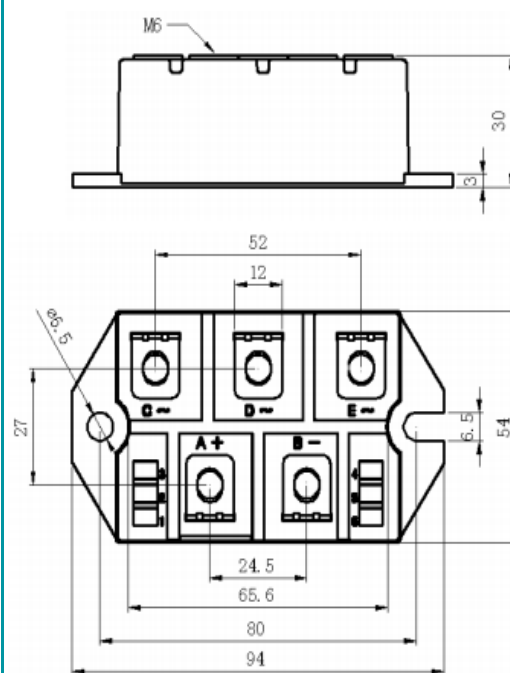
- Three phase bridge rectifier
- Blocking voltage: 1200 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip
- UL recognized applied for file no. E304417

Applications

- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- Input rectifiers for variable frequency drives

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

M16G



Package Outline Dimensions in Millimeters

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

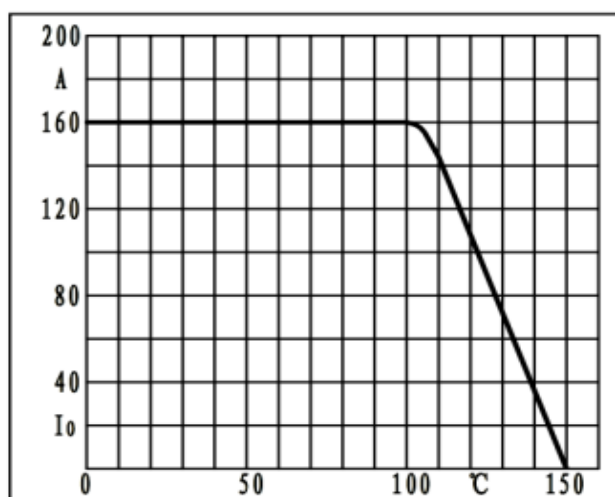
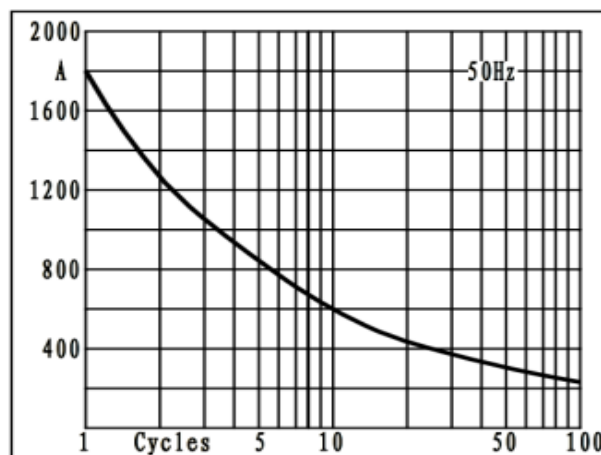
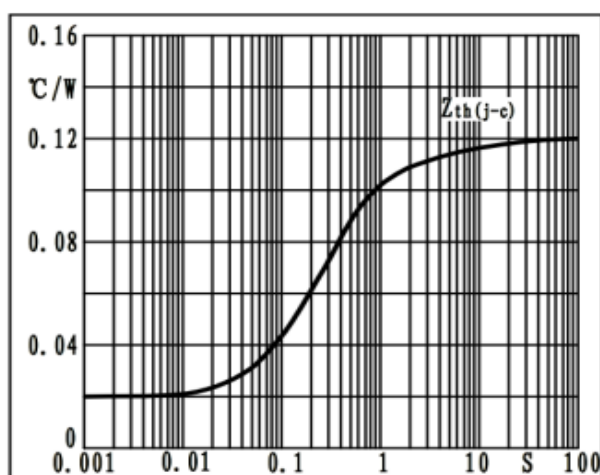
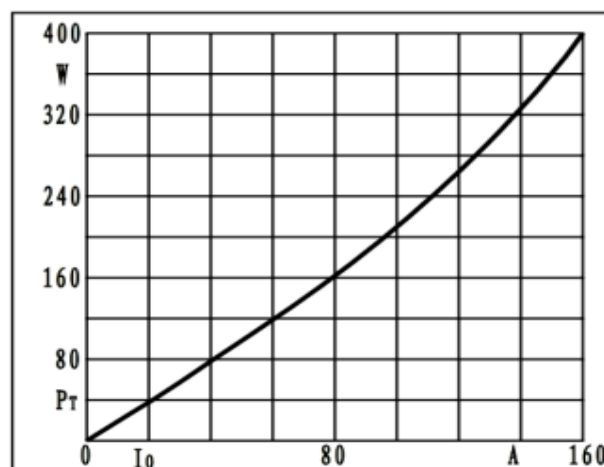
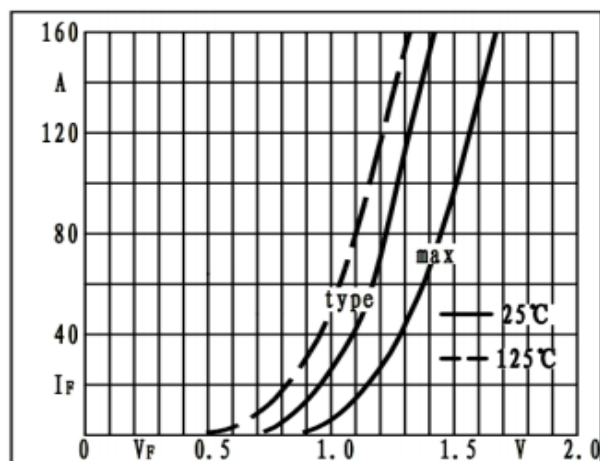
Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE		VRRM	VRSM		
MDS160G-12		1200V	1300V		
MDS160G-16		1600V	1700V		
MDS160G-18		1800V	1900V		
Characteristics	Symbol	Values		Unit	
Three phase, full wave Tc=100℃	ID	160		A	
t=10mS Tvj =45℃	IFSM	1800		A	
t=10mS Tvj =45℃	I ² t	16200		A ² s	
a.c.50HZ;r.m.s.;1min	Visol	3000		V	
	Tvj	-40 to + 150		℃	
	Tstg	-40 to + 125			
To terminals(M6)	Mt	5±15%		Nm	
To heatsink(M6)	Ms	5±15%		Nm	
Module (Approximately)	Weight	230		g	
Module	Rth(j-c)	0.12		℃/W	
Module	Rth(c-s)	0.03		℃/W	
T=25℃ IF=160A	VFM	Min	Typ	Max	V
		/	1.42	1.67	
Tvj =25℃,VRD=VRRM	IRD	/	/	16	uA
Tvj =150℃,VRD=VRRM				8	mA

MDS160G-*-B-00-00

Rev. 1, 22-Apr-2020



The curve above is for reference only.

MDS160G-*-B-00-00

Rev. 1, 22-Apr-2020



Disclaimer

ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

HY makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, HY disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on HY's knowledge of typical requirements that are often placed on HY products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify HY's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, HY products are not designed for use in medical, life-saving, or life-sustaining applications or for any other applications in which the failure of the HY product could result in personal injury or death. Customers using or selling HY products not expressly indicated for use in such applications do so at their own risk. Please contact authorized HY personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of HY. Product names and markings noted herein may be trademarks of their respective owners.