

FUJITSU GENERAL ELECTRONICS LIMITED

FGD-2P100D160T1

DIODE MODULE

1600V/100A PIM

- Features
 - Dual Diodes Cascaded Circuit



- Dimensions

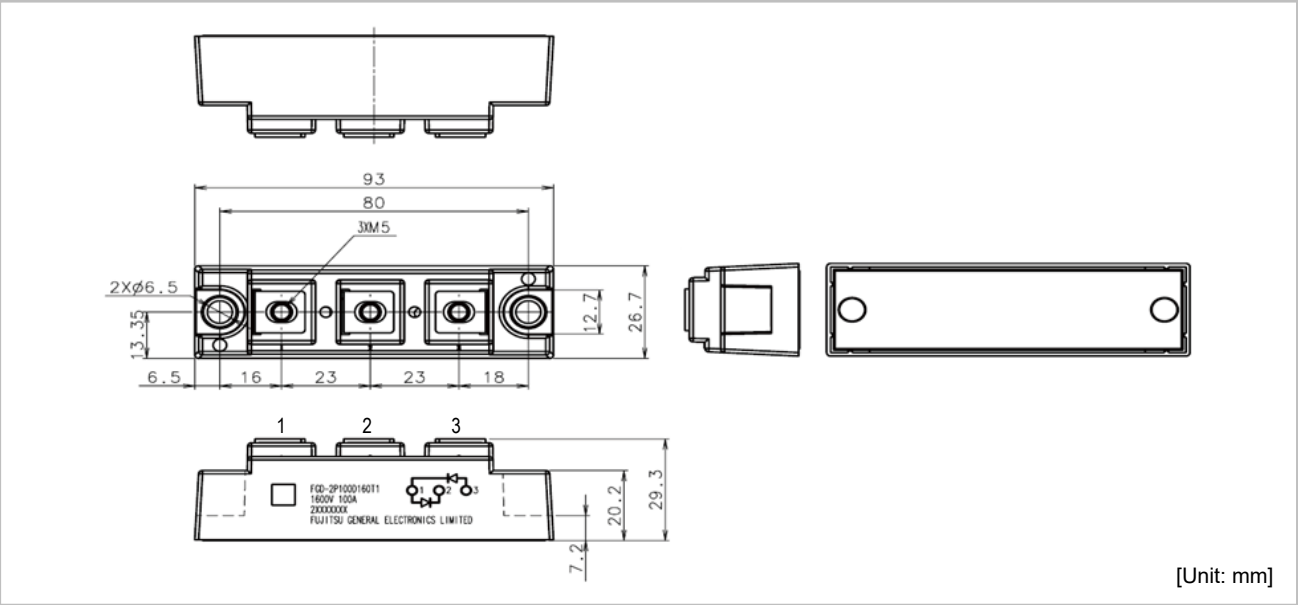


Fig.1. Dimensions

- Pin Functions

Pin No.	Function
1	D1: Anode D2: Cathode
2	D1: Cathode
3	D2: Anode

FGD-2P100D160T1

■ Block Diagram

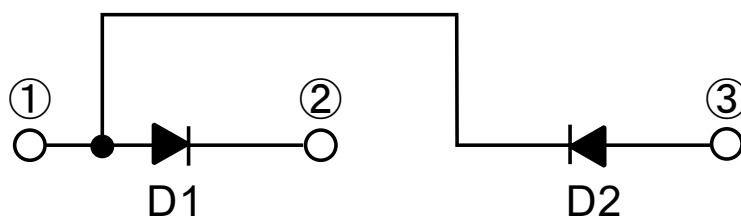


Fig.2. Block Diagram

■ Absolute Maximum Ratings (Tc=25°C unless otherwise specified)

Items	Symbol	Conditions	Rated Value	Units	
Repetitive Peak Reverse Voltage (*1)	V_{RRM}	$I_R=100\mu A$	1600	V	
Average Rectified Output Current (*1)	I_{OAV}	50Hz Half Sine Wave condition Tc=80°C	100	A	
RMS Forward Current (*1)	I_{FRMS}		156	A	
Surge Forward Current (*1)	I_{FSM}	50Hz Half Sine Wave condition 1 Pulse	1000	A	
I Squared t (*1)	I^2t	2msec. to 10 msec.	5000	A ² s	
Operating Junction Temperature Range	T_{jw}		-40~150	°C	
Storage Temperature Range	T_{stg}		-40~125	°C	
Isolation Voltage	V_{iso}	Base Plate to Terminals, AC1min	2500	V	
Mounting Torque	Case Mounting	F_{tor}	M6 Screw	2.4~2.8 (Max.=5.8)	N·m
	Terminals		M5 Screw	2.4~2.8	N·m
Tensile Strength	Terminals	10sec.	2.0	N	

Note*1: Value Per 1 Arm

■ Electrical / Thermal Characteristics (Tj=25°C unless otherwise specified)

Items	Symbol	Conditions	Max.	Unit
Peak Reverse Current (*2)	I_{RM}	$T_j=125^\circ C, V_{RM}=V_{RRM}$	20	mA
Peak Forward Voltage (*2)	V_{FM}	$T_j=25^\circ C, I_{FM}=320A$	1.38	V
Thermal Resistance (*2)	R_{thj-c}	Junction to Case	0.33	°C/W

Note*2: Value Per 1 Arm

■ Weight

Items	Symbol	Min.	Typ.	Max.	Units
Weight	Wt	-	128	-	g

Disclaimer

Notes on descriptions in this document and before using this product

- (1) When exporting or taking out the product and technical information described in this document, please comply with the "Foreign Exchange and Foreign Trade Control Law", "Export Administration Regulations" and related laws and regulations.
- (2) The technical information described in this document shows characteristics of the product, applied circuits, etc. and does not imply assurance of the industrial property rights, etc. or permission of the execution rights.
- (3) This product has been designed to be used for general electronic equipment for standard purposes. This product cannot be used for any purpose with which special quality and reliability are required and breakdown or malfunction of it may directly threaten a human life or harm a human body (for special uses such as for aviation and aerospace purposes, for burning appliances, traffic equipment, life support equipment and safety devices)
- (4) Please pay special attention to the operational power source voltage range, category temperature/humidity range when using this product. If used exceeding the guaranteed values, we are not liable for any defect or breakdown that has happened after the use. Even if used within the guaranteed values, be sure to have redundancy design with which equipment using our product is not contrary to various laws due to operation of our product.