Nihon Inter Electronics Corporation

DIODE MODULE 100A/1200 to 1600V

PC10012 PC10016

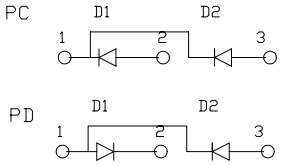
PD10012 PD10016

FEATURES

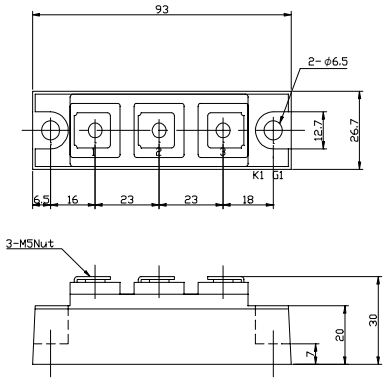
* Isolated Base
* Dual Diodes Cathode Common and Cascaded Circuit
* High Surge Capability
* UL Recognized, File No. E187184

TYPICAL APPLICATIONS

* Rectified For General Use



OUTLINE DRAWING



Approx Net Weight:155g

Maximum Ratings

Parameter	Symbol	Type / Grade		Unit
		PC10012 / PD10012	PC10016 / PD10016	
Repetitive Peak Reverse Voltage *1	V_{RRM}	1200	1600	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	1300	1700	

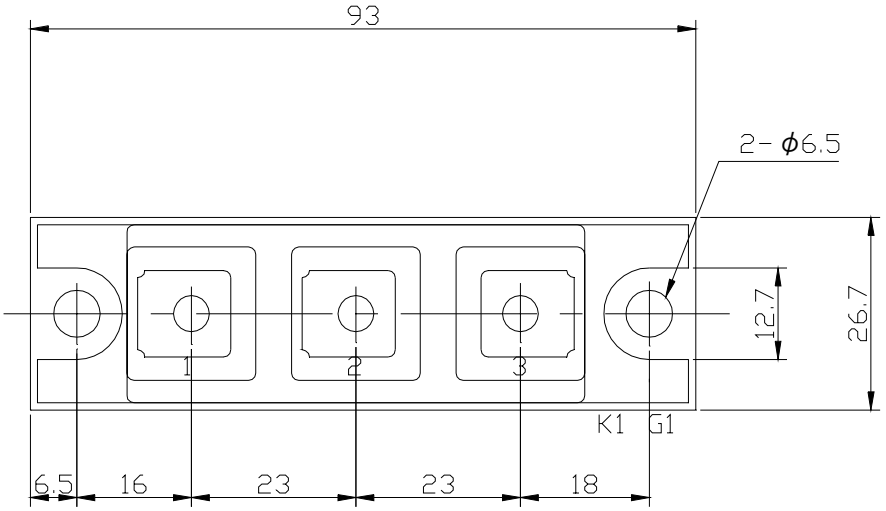
Parameter			Conditions	Max Rated Value	Unit
Average Rectified Output Current *1		$I_{O(AV)}$	50Hz Half Sine Wave condition Tc=80°C	100	A
RMS Forward Current *1		$I_{F(RMS)}$		156	A
Surge Forward Current *1		I_{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive	2000	A
I Squared t *1		I^2t	2msec to 10msec	20000	A^2s
Operating JunctionTemperature Range		Tjw		-40 to +150	°C
Storage Temperature Range		Tstg		-40 to +125	°C
Isoration Voltage		Viso	Base Plate to Terminals, AC1min	2500	V
Mounting torque	Case mounting	Ftor	M6 Screw	2.4 to 3.5	N•m
	Terminals		M5 Screw	2.4 to 2.8	

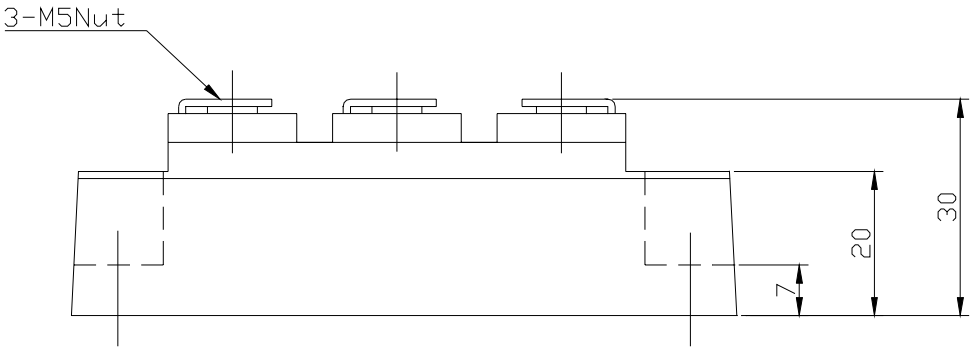
Electrical • Thermal Characteristics

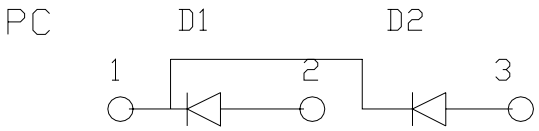
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	V_{RM}= V_{RRM}, Tj= 125°C	20	mA
Peak Forward Voltage *1	V_{FM}	I_{FM}= 320A, Tj=25°C	1.35	V
Thermal Resistance *1	Rth(j-c)	Junction to Case	0.35	°C/W
	Rth(c-f)	Base Plate to Heat Sink with Thermal Compound	0.2	

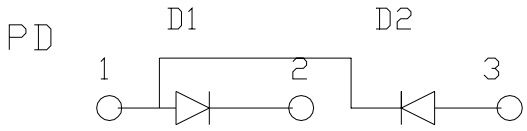
*1: Value Per 1Arm

PC/PD10012 OUTLINE DRAWING (Dimensions in mm)

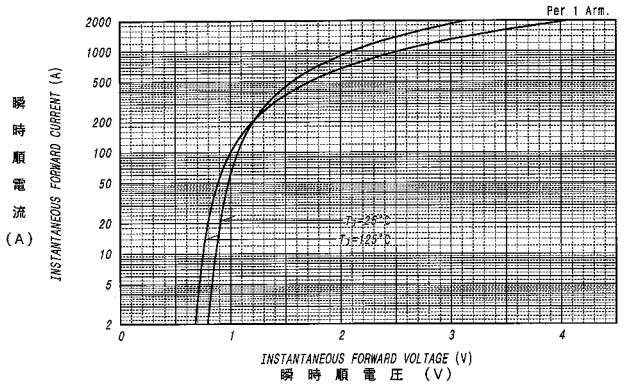




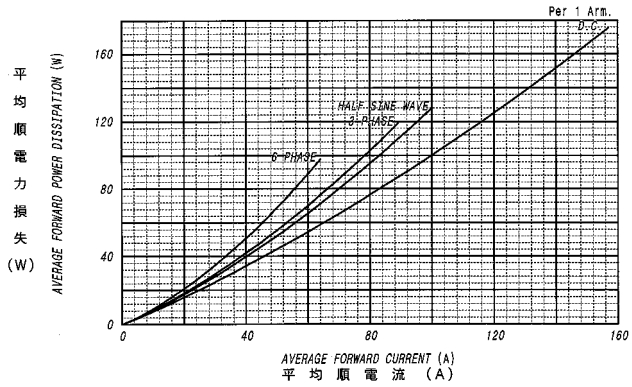




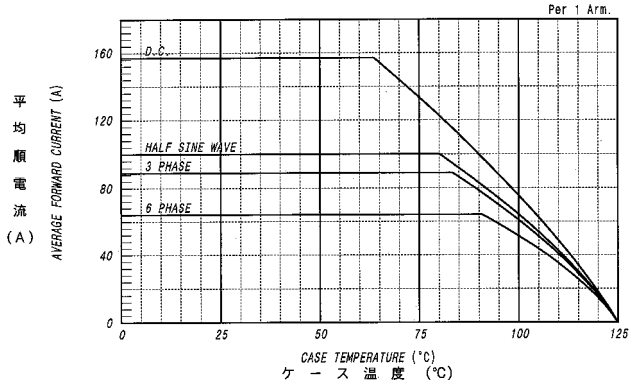
順電圧特性
FORWARD CURRENT VS. VOLTAGE



平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

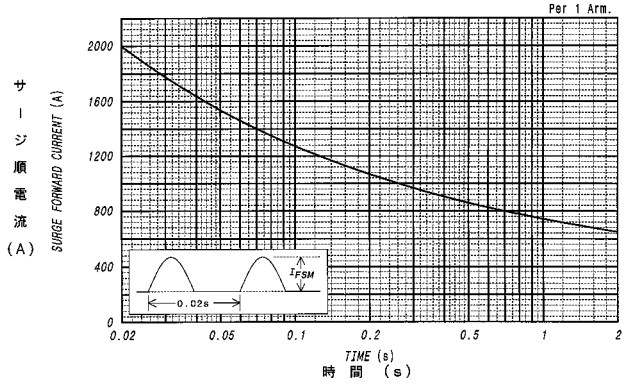


平均順電流－ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, Tj=125°C



過渡熱抵抗特性
MAXIMUM TRANSIENT THERMAL IMPEDANCE

Junction to Case

