

DIODE MODULE 30A/1200 to 1600V

PC3012 PC3016

PD3012 PD3016

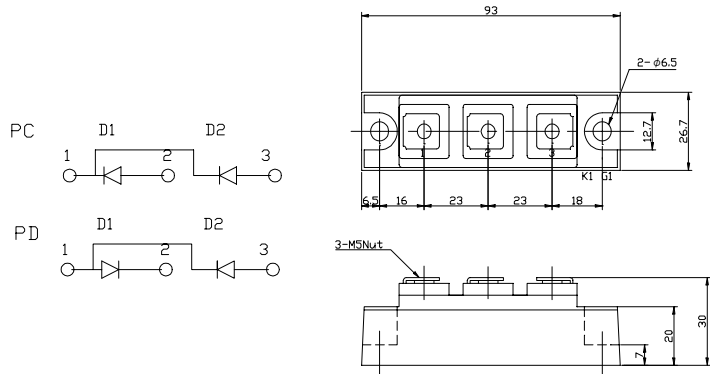
FEATURES

- * 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



Maximum Ratings

Approx Net Weight:155g

Parameter	Symbol	Type / Grade		Unit
		PC3012 / PD3012	PC3016 / PD3016	
Repetitive Peak Reverse Voltage *1	V_{RRM}	1200	1600	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	1300	1700	

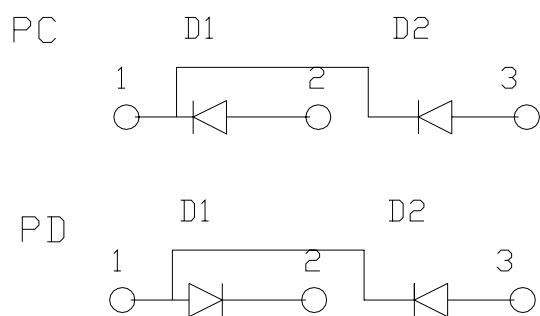
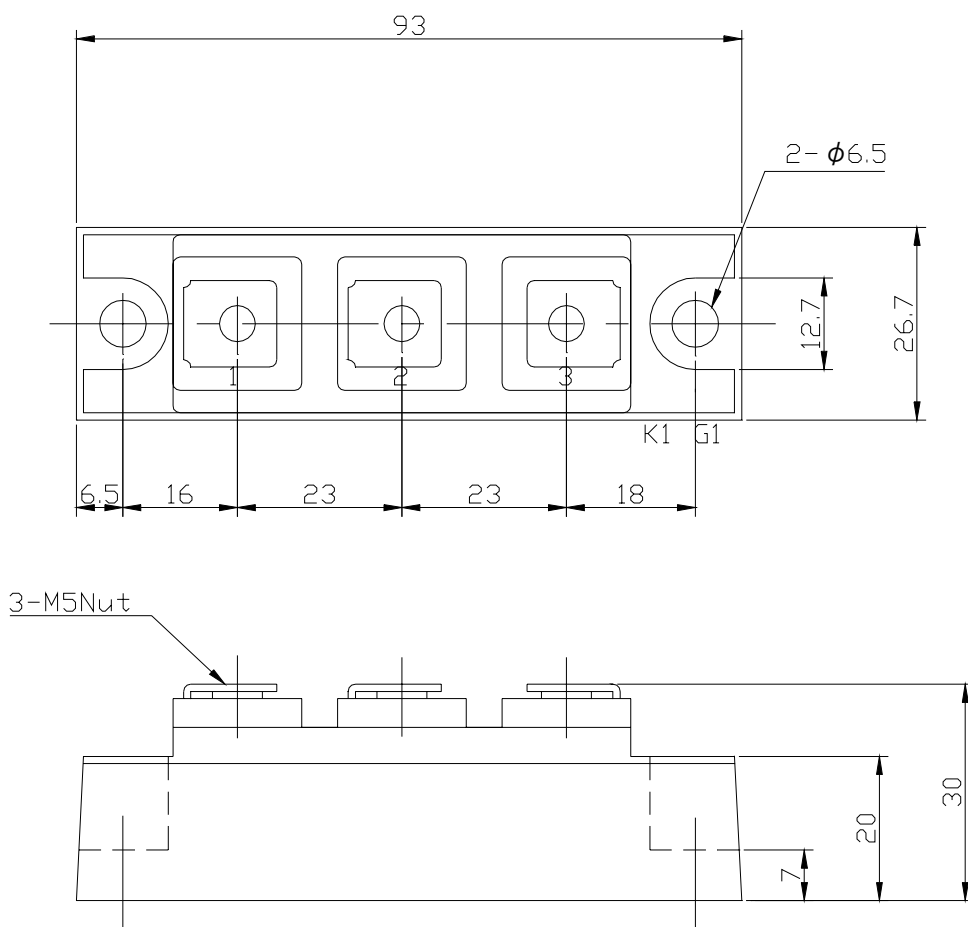
Parameter			Conditions	Max Rated Value	Unit
Average Rectified Output Current *1		I _{O(AV)}	50Hz Half Sine Wave condition T _c =100°C	30	A
RMS Forward Current *1		I _{F(RMS)}		47	A
Surge Forward Current *1		I _{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive	600	A
I Squared t *1		I ² t	2msec to 10msec	1800	A ² s
Operating JunctionTemperature Range		T _{jw}		-40 to +125	°C
Storage Temperature Range		T _{stg}		-40 to +125	°C
Isoration Voltage		Viso	Base Plate to Terminals, AC1min	2500	V
Mounting torque	Case mounting	F _{tor}	M6 Screw	2.4 to 3.5	N.m
	Terminals		M5 Screw	2.4 to 2.8	

Electrical • Thermal Characteristics

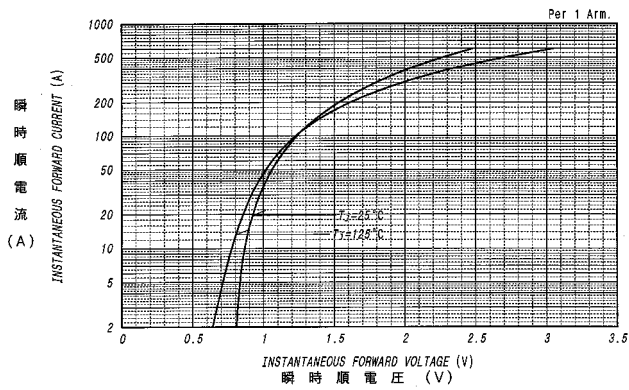
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM}= V_{RRM}$, $T_j= 125^{\circ}C$	10	mA
Peak Forward Voltage *1	V_{FM}	$I_{FM}= 90A$, $T_j=25^{\circ}C$	1.30	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.7	$^{\circ}C/W$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.2	

*1: Value Per 1Arm

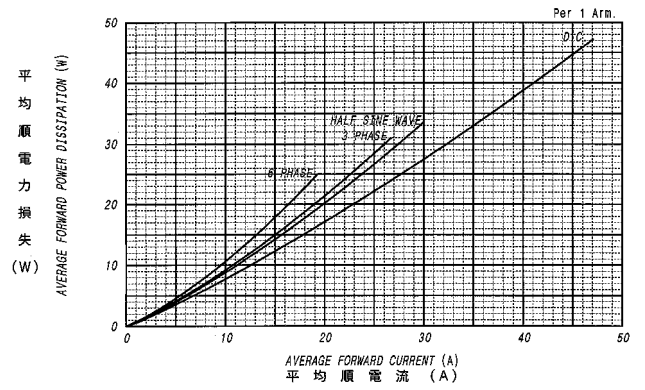
PC/PD3012 OUTLINE DRAWING (Dimensions in mm)



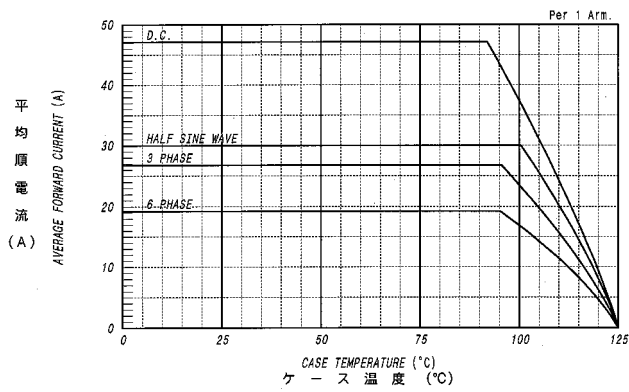
順電圧特性
FORWARD CURRENT VS. VOLTAGE



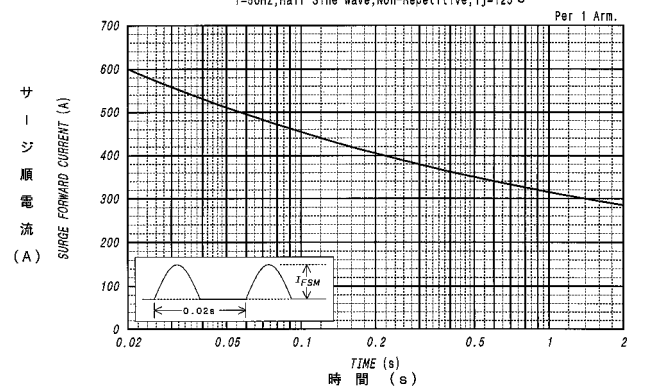
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION



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



過渡熱抵抗特性
MAXIMUM TRANSIENT THERMAL IMPEDANCE
Junction to Case

