

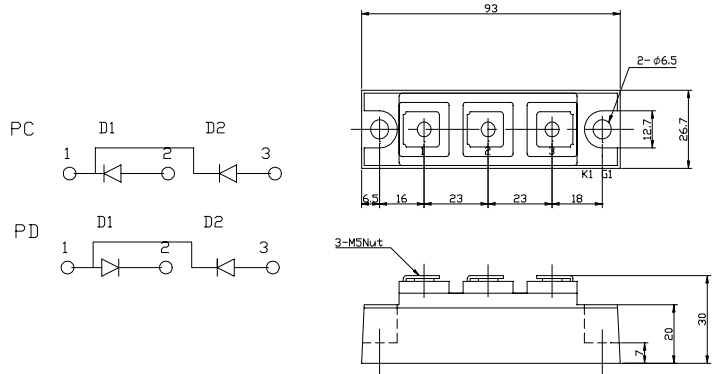
# DIODE MODULE 30A/1200 to 1600V

**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	

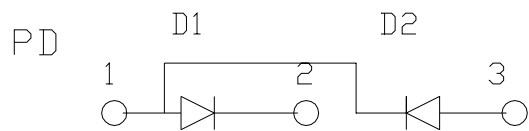
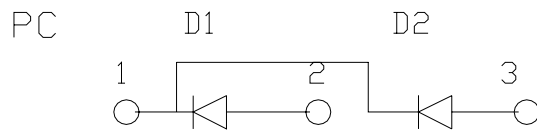
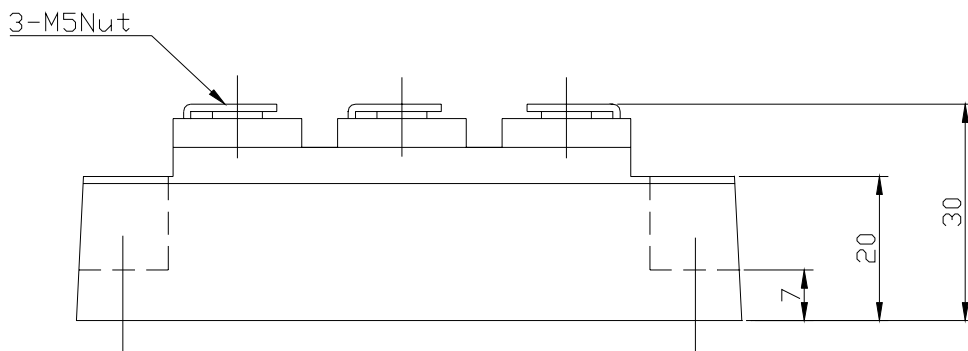
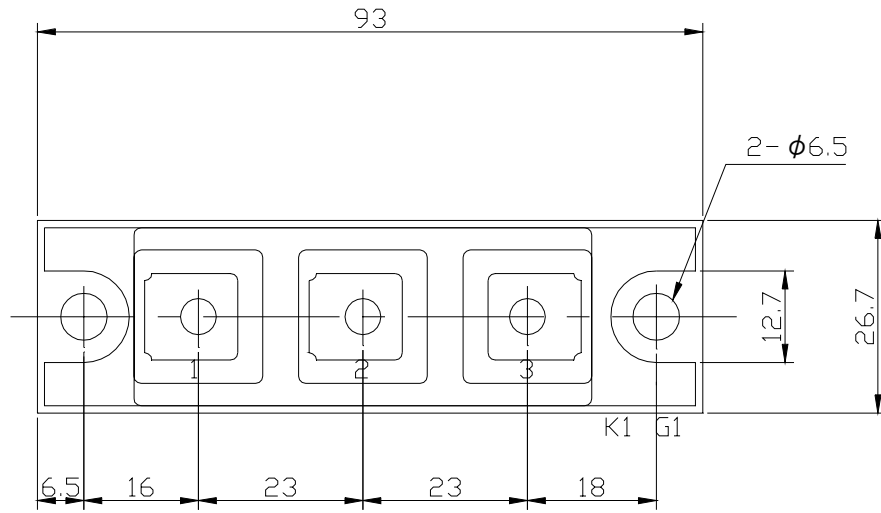
Parameter	Symbol	Conditions	Max Rated Value	Unit	
Average Rectified Output Current *1	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=100^{\circ}C$	30	A	
RMS Forward Current *1	$I_{F(RMS)}$		47	A	
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave, 1Pulse Non-repetitive	600	A	
I Squared t *1	$I^2t$	2msec to 10msec	1800	$A^2s$	
Operating Junction Temperature Range	$T_{jw}$		-40 to +125	$^{\circ}C$	
Storage Temperature Range	$T_{stg}$		-40 to +125	$^{\circ}C$	
Isolation Voltage	$V_{iso}$	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**

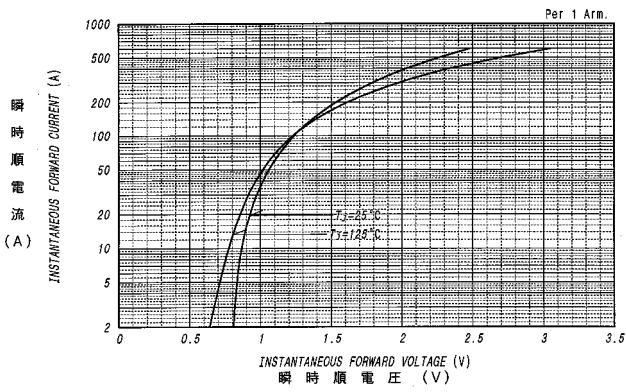
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	$I_{RM}$	$V_{RM}= V_{RRM}, T_j= 125^{\circ}C$	10	mA
Peak Forward Voltage *1	$V_{FM}$	$I_{FM}= 90A, T_j=25^{\circ}C$	1.30	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.7	$^{\circ}C/W$
	$R_{th(c-f)}$	Base Plate to Heat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

\*1: Value Per 1Arm

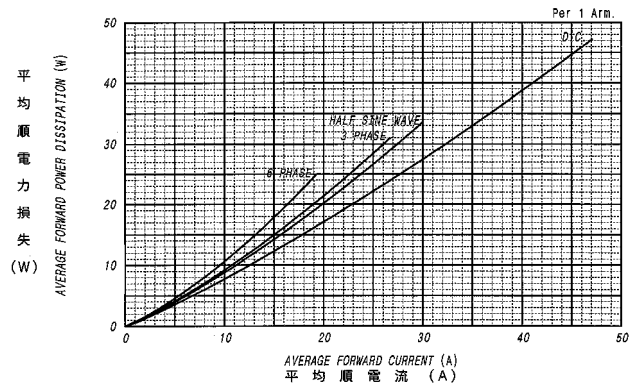
PC/PD3012 OUTLINE DRAWING (Dimensions in mm)



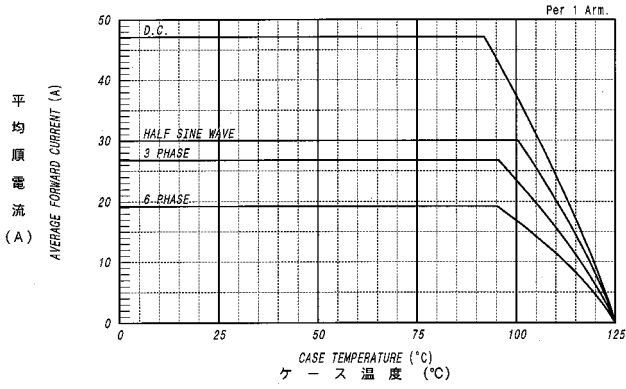
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



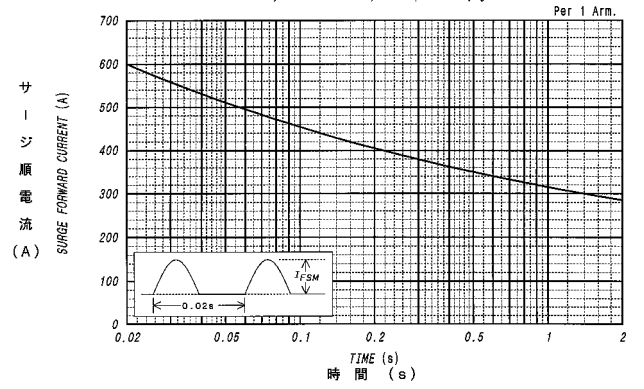
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



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

