

THYRISTOR MODULE

PCH3012 PCH3016

30A / 1200 to 1600V

FEATURES

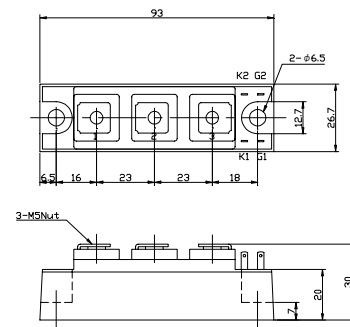
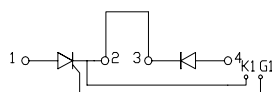
- * Isolated Base
- * Thyristor and Diode Cathode Common
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

- * Rectified For General Use

OUTLINE DRAWING

PCH



Maximum Ratings

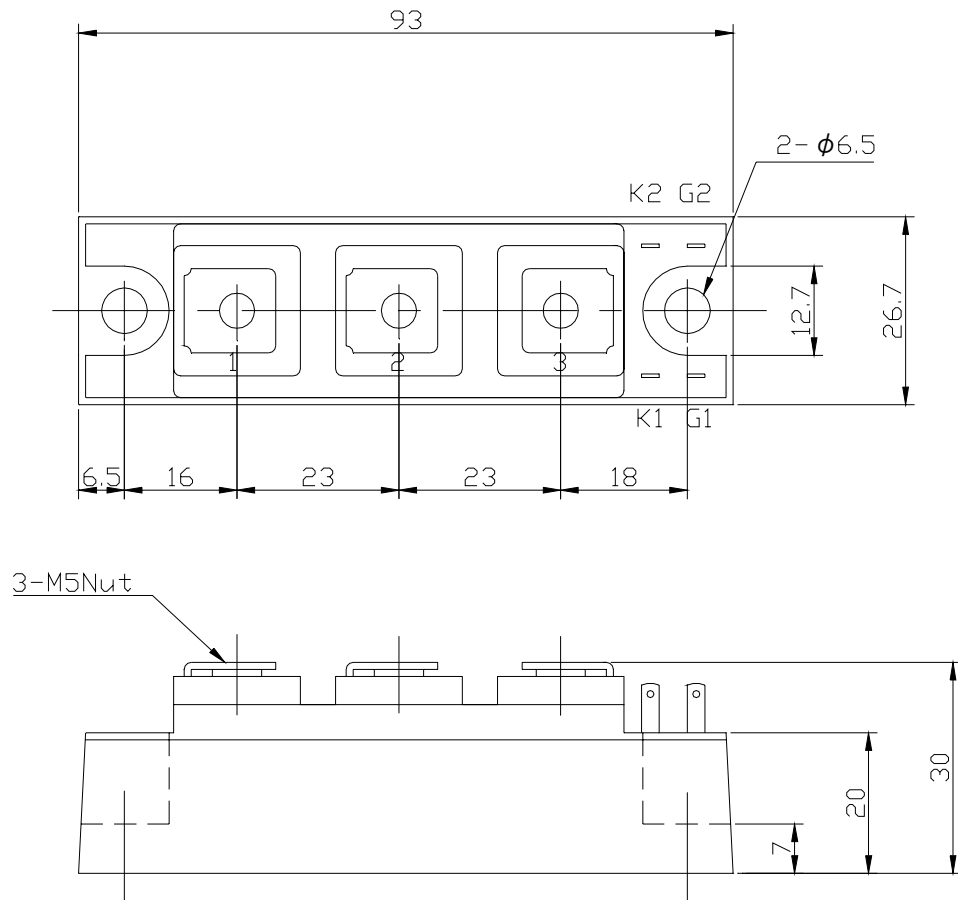
Approx Net Weight:155g

Parameter	Symbol	Grade		Unit
		PCH3012	PCH3016	
Repetitive Peak Off-State Voltage	V_{DRM}	1200	1600	V
Non Repetitive Peak Off-State Voltage	V_{DSM}	1300	1700	
Repetitive Peak Reverse Voltage	V_{RRM}	1200	1600	V
Non Repetitive Peak Reverse Voltage	V_{RSM}	1300	1700	

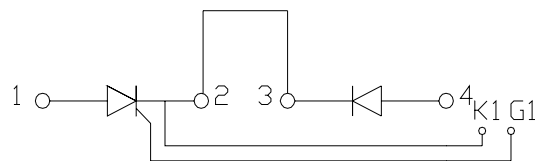
Parameter		Conditions	Max Rated Value	Unit
Average Rectified Output Current	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=96^{\circ}C$	30	A
RMS On-State Current	$I_{T(RMS)}$		47	A
Surge On-State Current	I_{TSM}	50 Hz Half Sine Wave,1Pulse Non-Repetitive	600	A
I Squared t	I^2t	2msec to 10msec	1800	A ² s
Critical Rate of Turned-On Current	di/dt	$V_D=2/3V_{DRM}$, $I_{TM}=2 \cdot I_O$, $T_j=125^{\circ}C$ $I_G=200mA$, $di_G/dt=0.2A/\mu s$	100	A/ μs
Peak Gate Power	P_{GM}		5	W
Average Gate Power	$P_{G(AV)}$		1	W
Peak Gate Current	I_{GM}		2	A
Peak Gate Voltage	V_{GM}		10	V
Peak Gate Reverse Voltage	V_{RGM}		5	V
Operating JunctionTemperature Range	T_{jw}		-40 to +125	$^{\circ}C$
Storage Temperature Range	T_{stg}		-40 to +125	$^{\circ}C$
Isoration Voltage	Viso	Base Plate to Terminals, AC1min	2500	V
Mounting torque	Case mounting	Ftor	M6 Screw	2.4 to 3.5
	Terminals		M5 Screw	2.4 to 2.8

Value per 1 Arm

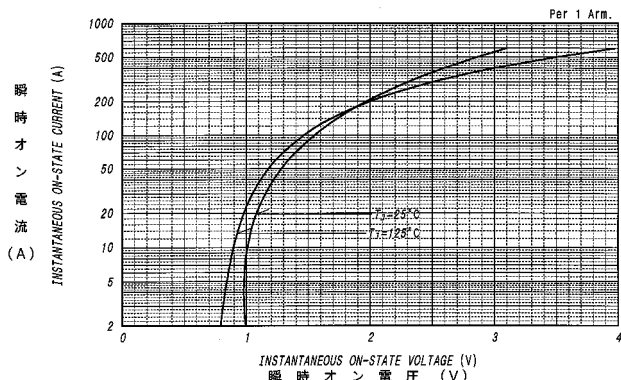
PCH301x OUTLINE DRAWING (Dimensions in mm)



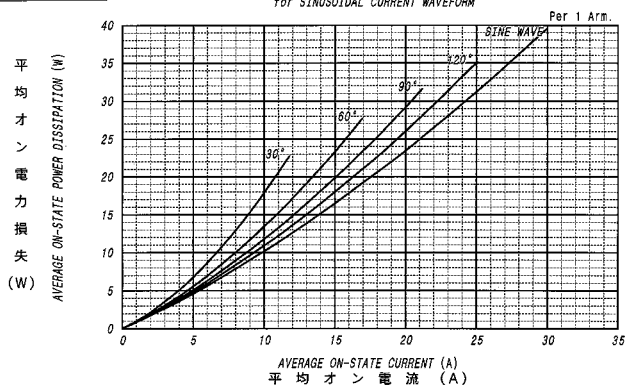
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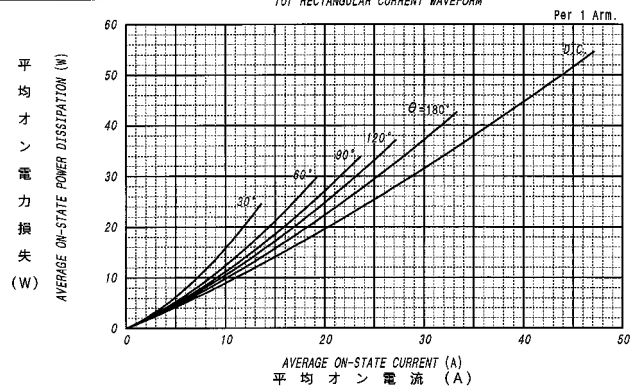
オン電圧特性
ON-STATE CURRENT VS. VOLTAGE



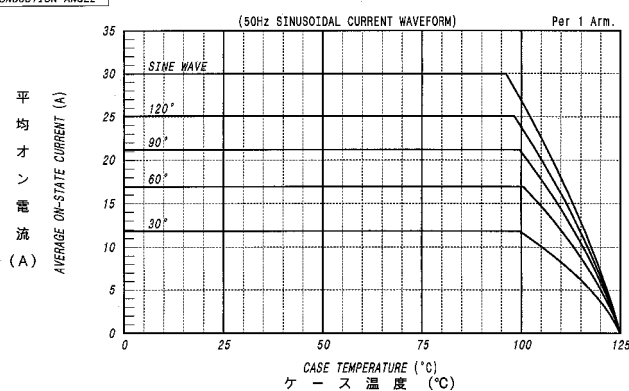
平均オン電力損失特性
AVERAGE ON-STATE POWER DISSIPATION
for SINUSOIDAL CURRENT WAVEFORM



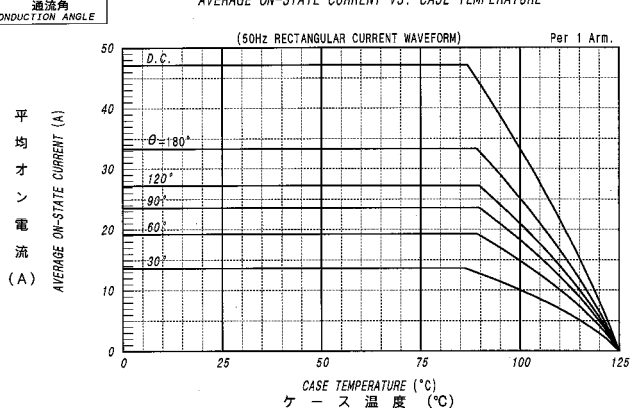
平均オン電力損失特性
AVERAGE ON-STATE POWER DISSIPATION
for RECTANGULAR CURRENT WAVEFORM



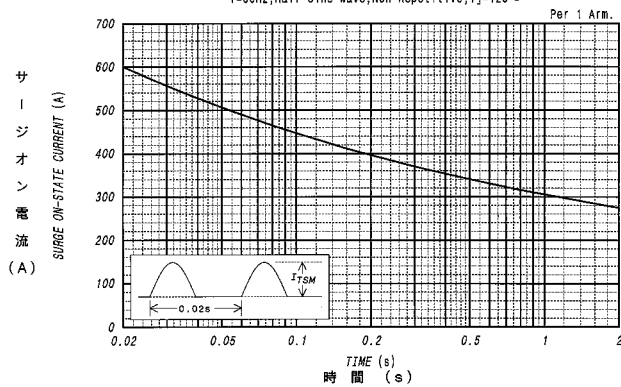
平均オン電流－ケース温度定格
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE



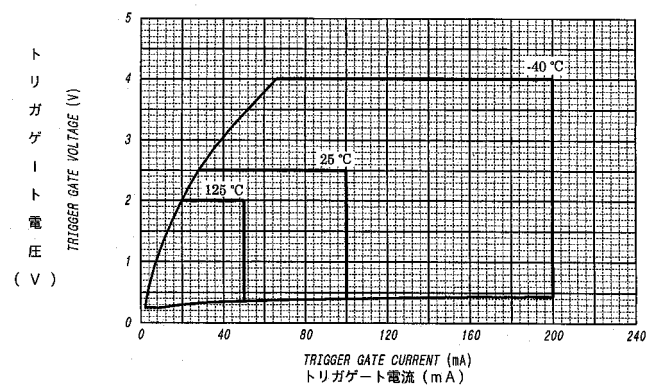
平均オン電流－ケース温度定格
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE



サージオン電流定格
SURGE CURRENT RATINGS
f=50Hz, Half Sine Wave, Non-Repetitive, Tj=125°C



ゲート特性
GATE CHARACTERISTICS



ゲート定格
GATE RATINGS

