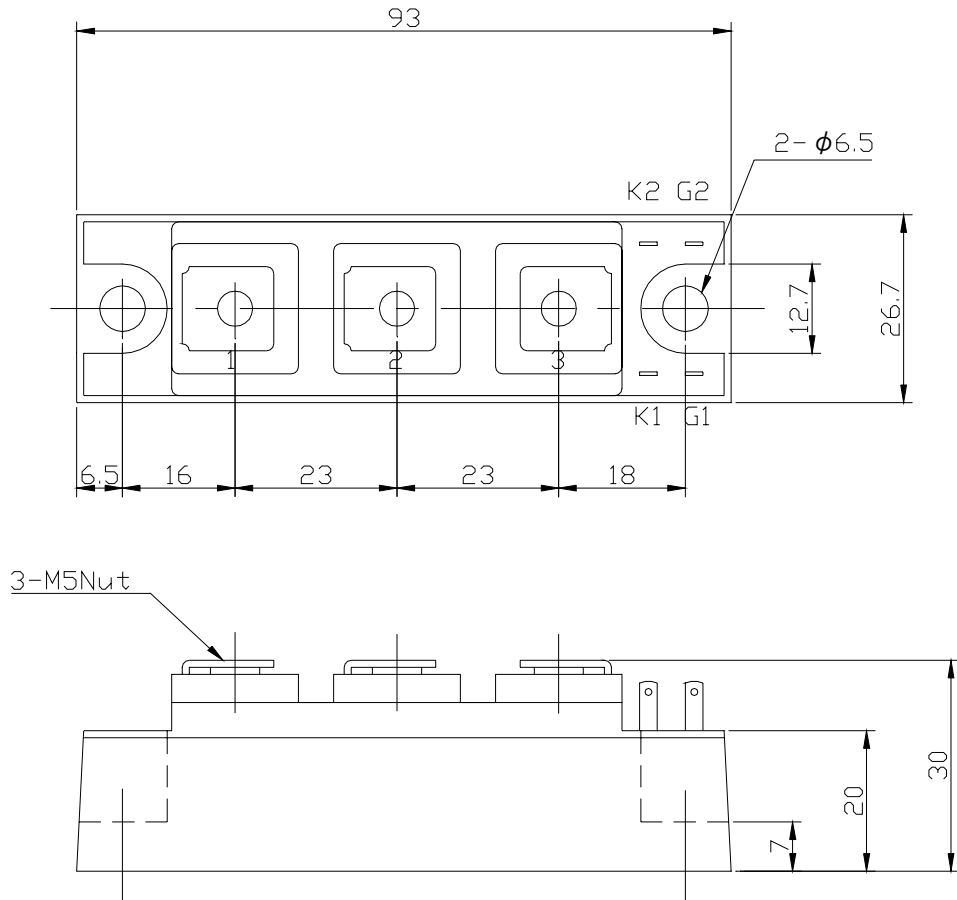


Electrical • Thermal Characteristics

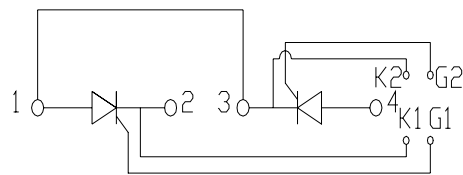
Characteristics	Symbol	Test Conditions	Maximum Value.			Unit
			Min.	Typ.	Max.	
Peak Off-State Current	I_{DM}	$V_{DM} = V_{DRM}, T_j = 125^\circ\text{C}$			20	mA
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}, T_j = 125^\circ\text{C}$			20	mA
Peak Forward Voltage	V_{TM}	$I_{TM} = 300\text{A}, T_j = 25^\circ\text{C}$			1.38	V
Gate Current to Trigger	I_{GT}	$V_D = 6\text{V}, I_T = 1\text{A}$	$T_j = -40^\circ\text{C}$		200	mA
			$T_j = 25^\circ\text{C}$		100	
			$T_j = 125^\circ\text{C}$		50	
Gate Voltage to Trigger	V_{GT}	$V_D = 6\text{V}, I_T = 1\text{A}$	$T_j = -40^\circ\text{C}$		4	V
			$T_j = 25^\circ\text{C}$		2.5	
			$T_j = 125^\circ\text{C}$		2	
Gate Non-Trigger Voltage	V_{GD}	$V_D = 2/3V_{DRM}, T_j = 125^\circ\text{C}$	0.25			V
Critical Rate of Rise of Off-State Voltage	dv/dt	$V_D = 2/3V_{DRM}, T_j = 125^\circ\text{C}$	500			V/ μs
Turn-Off Time	t_q	$I_{TM} = I_o, V_D = 2/3V_{DRM}$ $dv/dt = 20\text{V}/\mu\text{s}, V_R = 100\text{V}$ $-di/dt = 20\text{A}/\mu\text{s}, T_j = 125^\circ\text{C}$		100		μs
Turn-On Time	t_{gt}	$V_D = 2/3V_{DRM}, T_j = 125^\circ\text{C}$ $I_G = 200\text{mA}, di_G/dt = 0.2\text{A}/\mu\text{s}$		6		μs
Delay Time	t_d			2		μs
Rise Time	t_r			4		μs
Latching Current	I_L	$T_j = 25^\circ\text{C}$		100		mA
Holding Current	I_H	$T_j = 25^\circ\text{C}$		50		
Thermal Resistance	$R_{th(j-c)}$	Junction to Case			0.35	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound			0.2	

Value Per 1Arm

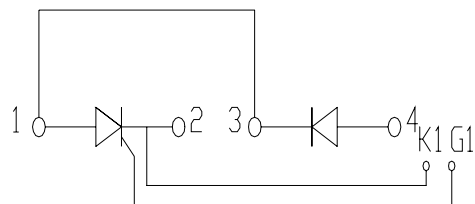
PDT/PDH1001x OUTLINE DRAWING (Dimensions in mm)



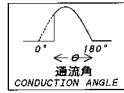
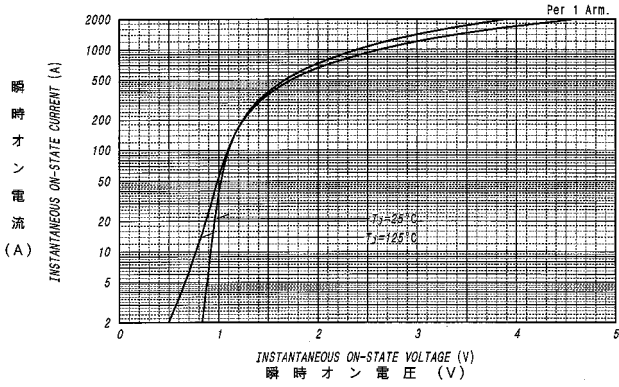
PDT



PDH

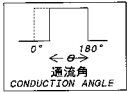
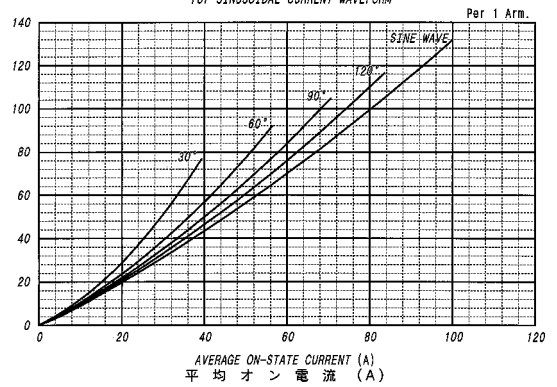


オン電圧特性
ON-STATE CURRENT VS. VOLTAGE



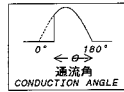
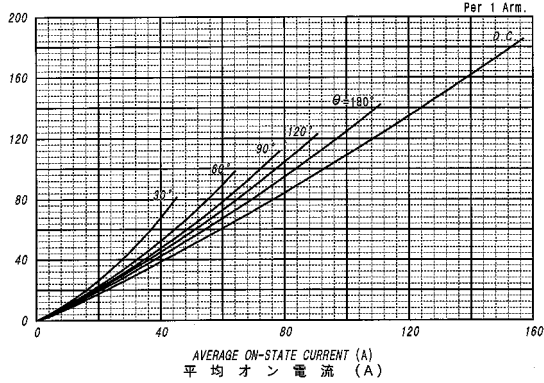
平均オン電力損失特性
AVERAGE ON-STATE POWER DISSIPATION
for SINUSOIDAL CURRENT WAVEFORM

平均オン電力損失 (W)



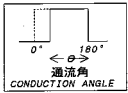
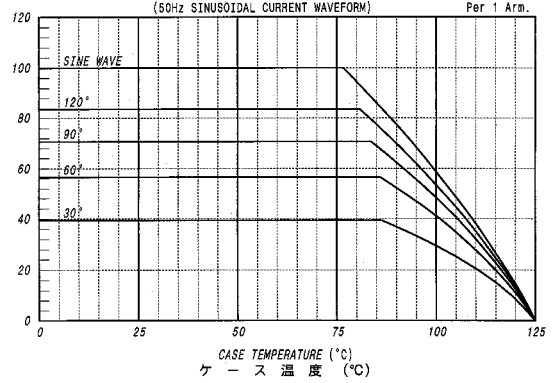
平均オン電力損失特性
AVERAGE ON-STATE POWER DISSIPATION
for RECTANGULAR CURRENT WAVEFORM

平均オン電力損失 (W)



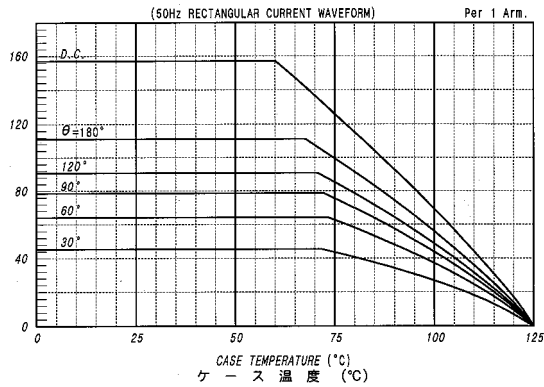
平均オン電流 - ケース温度定格
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE

平均オン電流 (A)



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

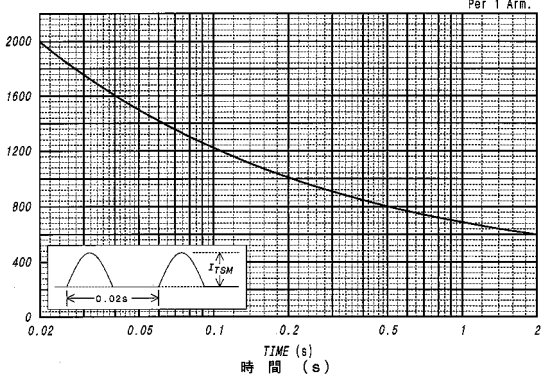
平均オン電流 (A)



サージオン電流定格
SURGE CURRENT RATINGS

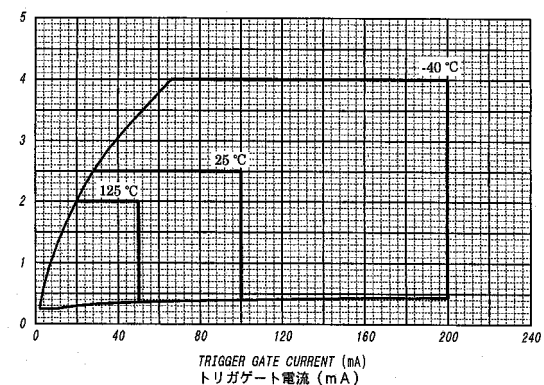
f=50Hz, Half Sine Wave, Non-Repetitive, Tj=125°C

サージオン電流 (A)



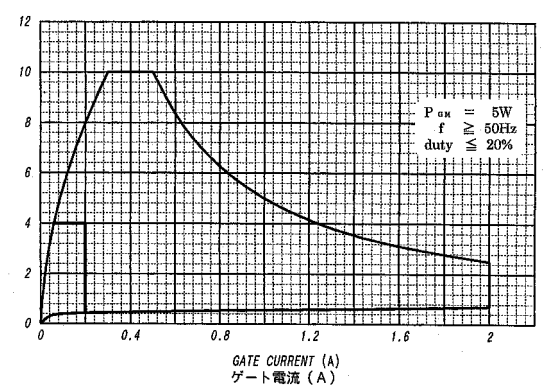
ゲート特性
GATE CHARACTERISTICS

トリガゲート電圧 (V)



ゲート定格
GATE RATINGS

ゲート電圧 (V)



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

