

3A 100V 90ns

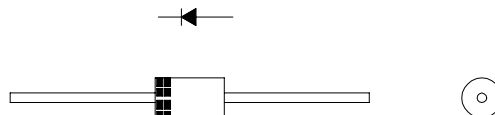
FRD Type : 30PRA10

■OUTLINE DRAWING

構造 : 拡散型シリコンダイオード(FRD)
リード線型

Construction: Diffusion Type Rectifier Diode
Axial Lead Type

用途 : 高周波整流用
Application: High Frequency Rectification



■最大定格 / Maximum Ratings

Approx Net Weight:1.19g

Rating	Symbol	30PRA10			Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V _{RRM}	100			V
平均整流電流 Average Rectified Output Current	I _O	3.0	Tl=124℃ Tl=Lead Temperature	50Hz, 正弦半波通電 Half Sine Wave 抵抗負荷 Resistive Load	A
		1.6	Ta=34℃ *1		
実効順電流 RMS Forward Current	I _{F(RMS)}	4.71			A
サージ順電流 Surge Forward Current	I _{FSM}	100	50Hz 正弦半波, 1サイクル, 非くり返し Half Sine Wave, 1cycle, Non-repetitive		A
動作接合温度範囲 Operating Junction Temperature Range	Tj _W	- 40 ~ + 150			℃
保存温度範囲 Storage Temperature Range	Tstg	- 40 ~ + 150			℃

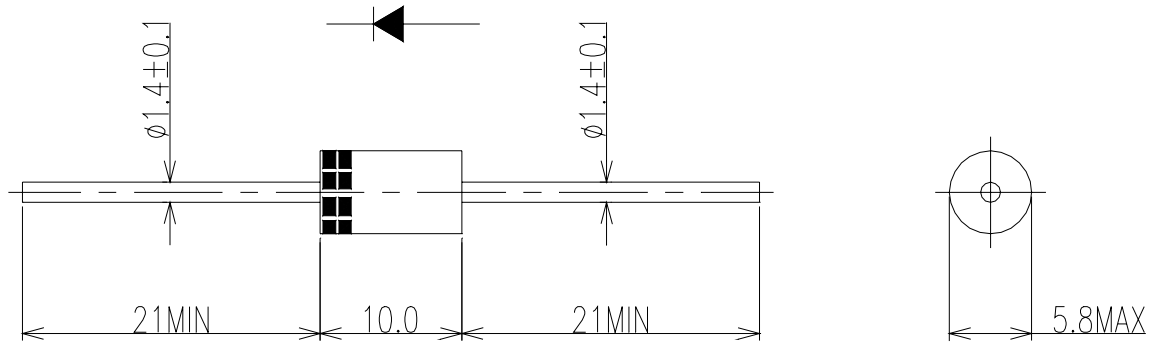
■電氣的・熱的特性 / Electrical/Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	$T_j = 25^{\circ}\text{C}, V_{RM} = V_{RRM}$	-	-	10	μA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$T_j = 25^{\circ}\text{C}, I_{FM} = 3\text{ A}$	-	-	1.07	V
逆回復時間 Reverse Recovery Time	t_{rr}	$T_a = 25^{\circ}\text{C}, I_{FM} = 3\text{A}, -di/dt = 50\text{A}/\mu\text{s}$			90	ns
熱抵抗 Thermal Resistance	$R_{th(j-a)}$	接合部・リード間 Junction to Lead	-	-	8	$^{\circ}\text{C}/\text{W}$
		接合部・周囲間 *1 Junction to Ambient	-	-	80	

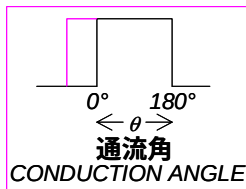
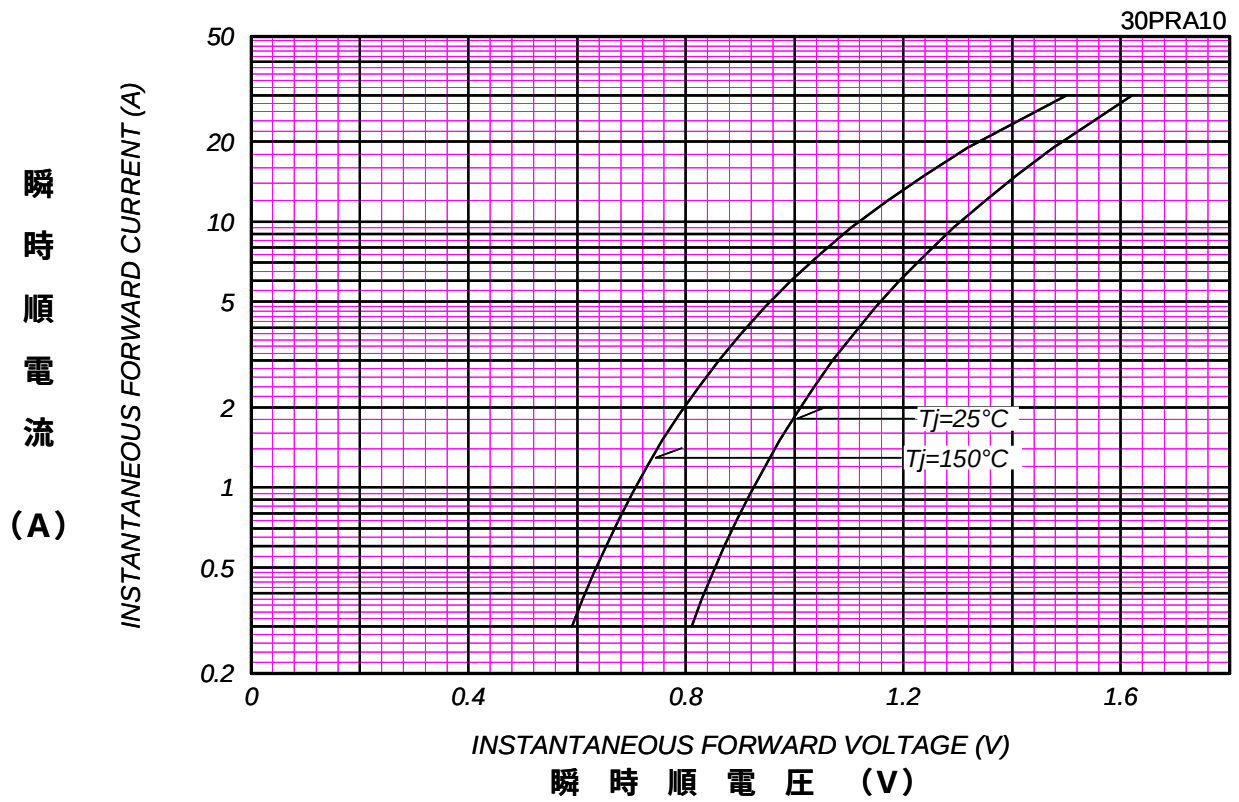
*1: 単体フィン無し / Without Fin or P.C. Board



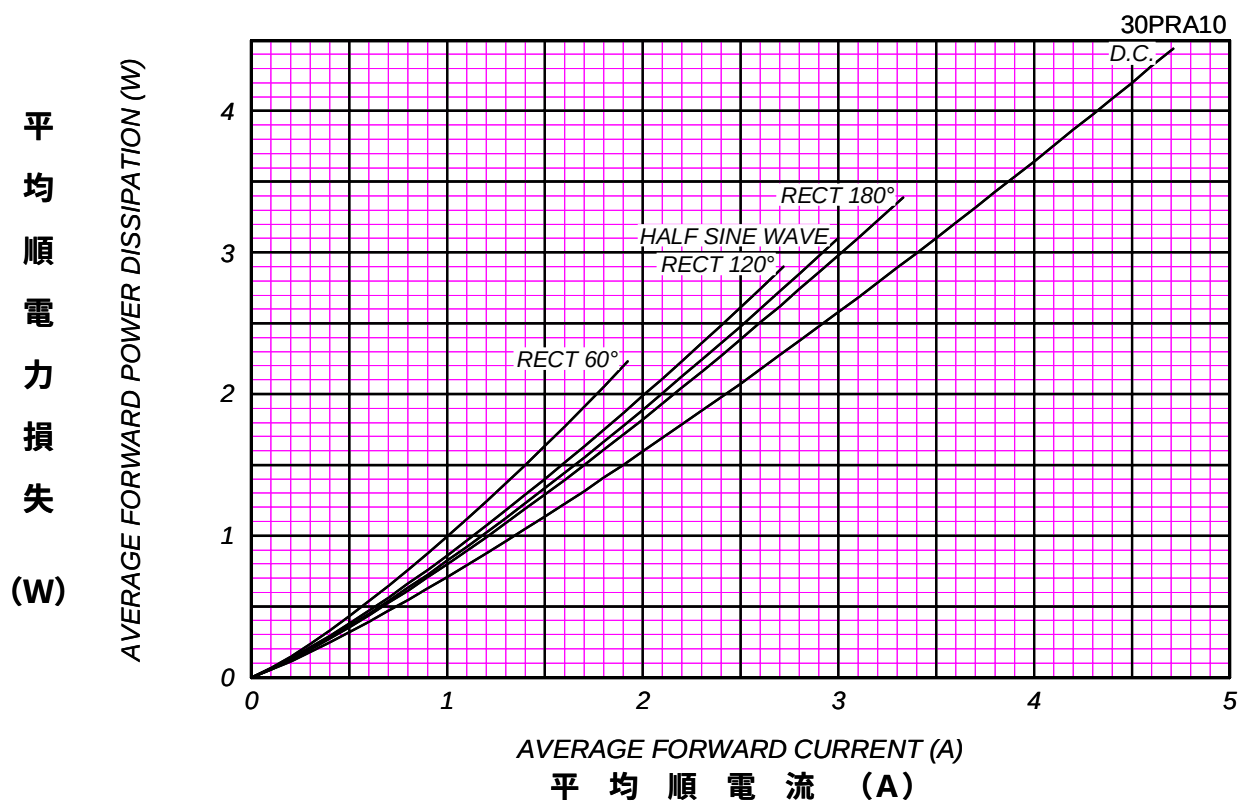
30 PRA_外形図 (mm)

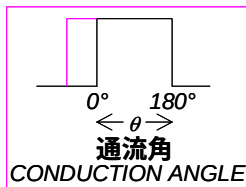


順電圧特性 FORWARD CURRENT VS. VOLTAGE



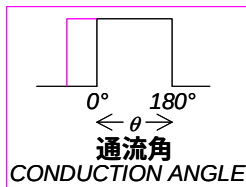
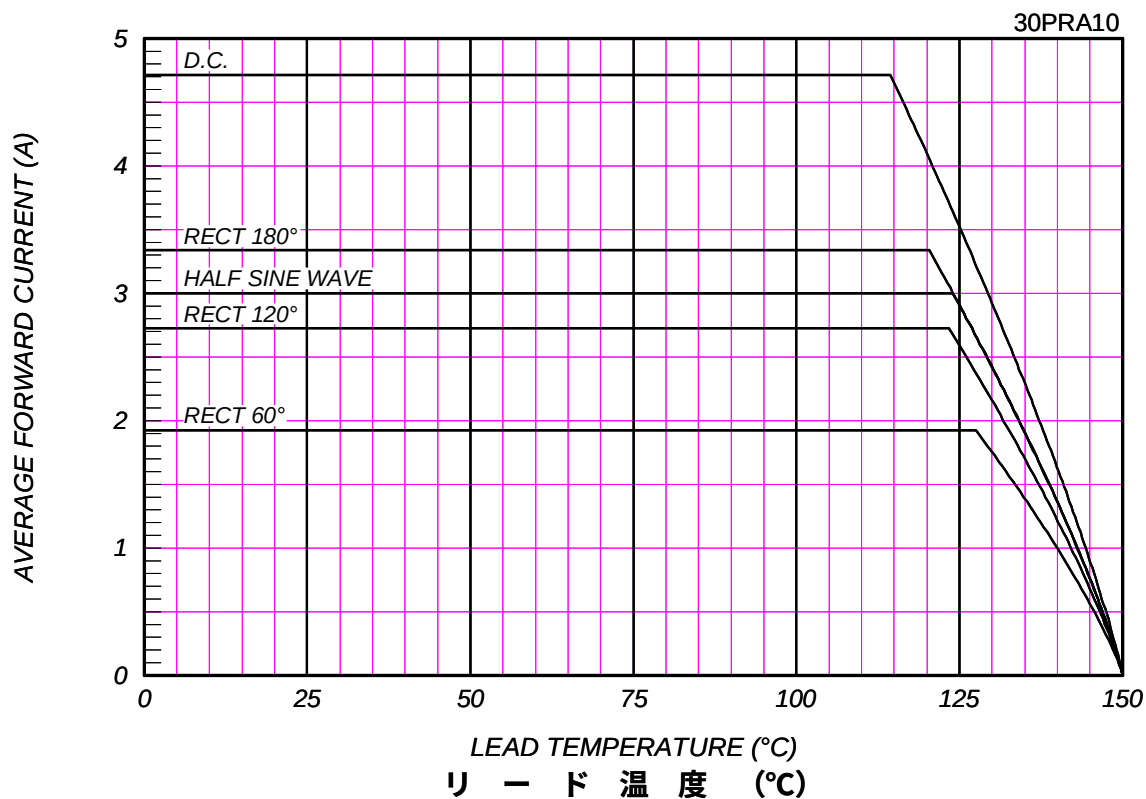
平均順電力損失特性 AVERAGE FORWARD POWER DISSIPATION





平均順電流－リード温度定格 AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

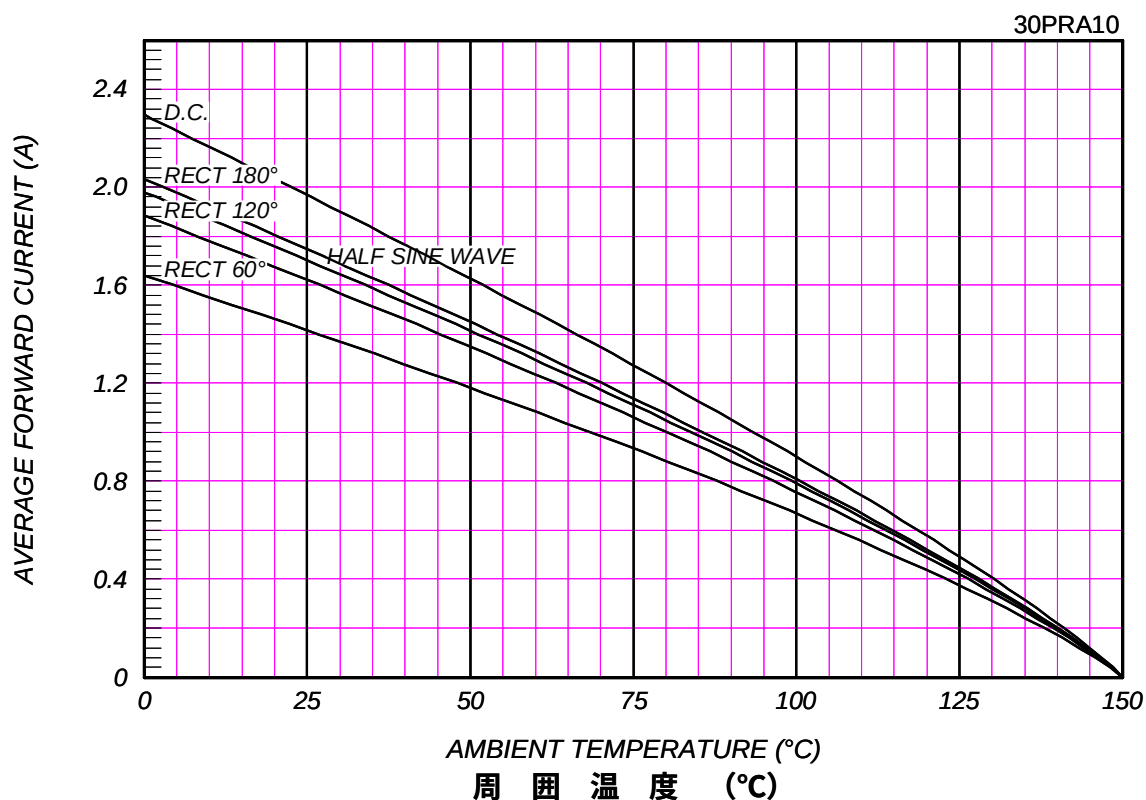
平均順電流
 (A)



平均順電流－周囲温度定格 AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board

平均順電流
 (A)



サージ順電流定格

SURGE CURRENT RATINGS

f=50Hz, Harf Sine Wave, Non-Repetitive, No Load

30PRA10

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