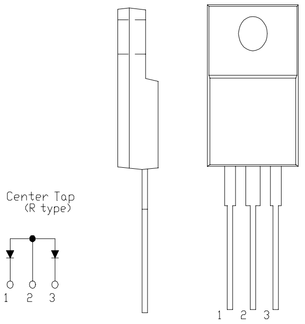
日本インター株式会社

FRD Type：F10P20FR

構造　　：拡散型シリコンダイオード(F R D)
Construction: Diffusion-type Silicon Diode

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

■OUTLINE DRAWING



■最大定格 / Maximum Ratings

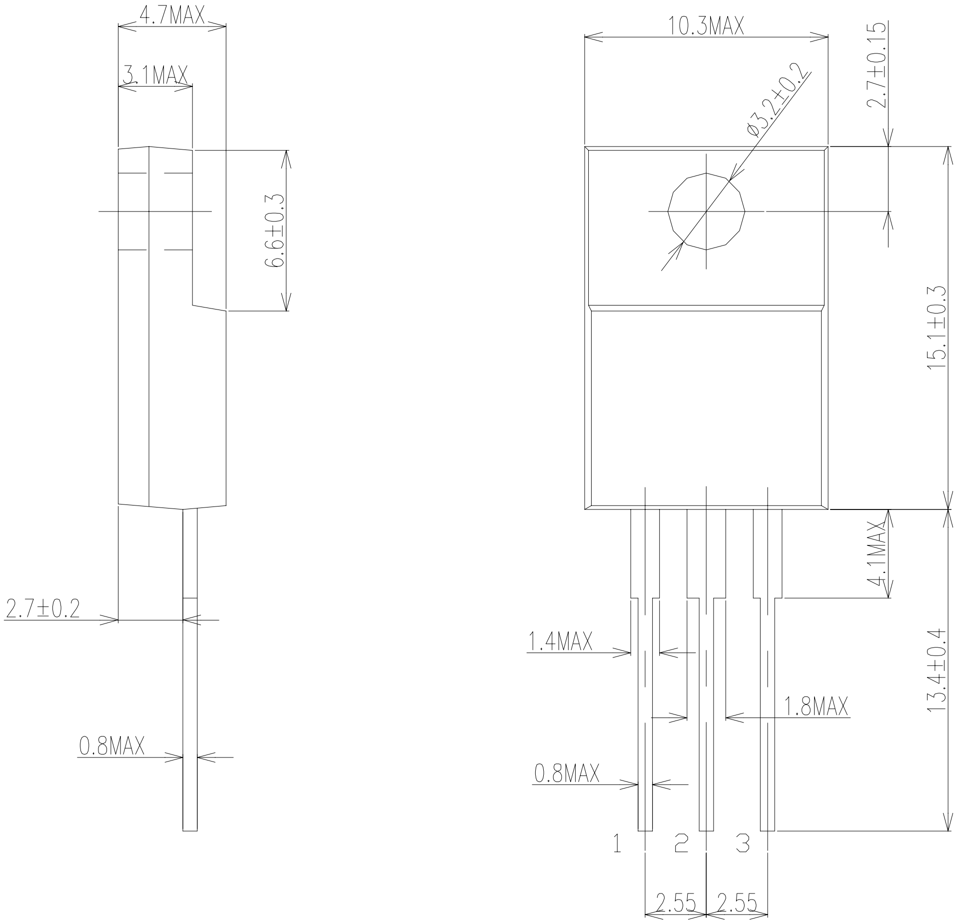
Approx Net Weight:1.75g

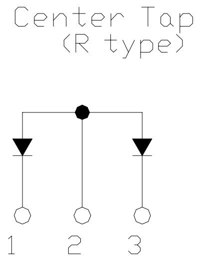
Rating	Symbol	F10P20FR			Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}	200			V
非くり返しピーク逆電圧 Non-repetitive Peak Reverse Voltage	V_{RSM}	220			V
平均整流電流 Average Rectified Output Current	I_0	10	Tc=117°C	50 Hz,正弦全波通電抵抗負荷 Full Sine Wave ResistiveLoad	A
実効順電流 RMS Forward Current	$I_{F(RMS)}$	11.1			A
サージ順電流 Surge Forward Current	I_{FSM}	80	50 Hz 正弦全波, 1サイクル, 非くり返し Full Sine Wave,1cycle,Non-repetitive		A
動作接合温度範囲 Operating JunctionTemperature Range	Tjw	- 40 ～ + 150			°C
保存温度範囲 Storage Temperature Range	Tstg	- 40 ～ + 150			°C
締め付けトルク Mounting torque		0.5	推奨値 Recommended value		N•m

■電気的・熱的特性 / Electrical ・ Thermal Characteristics

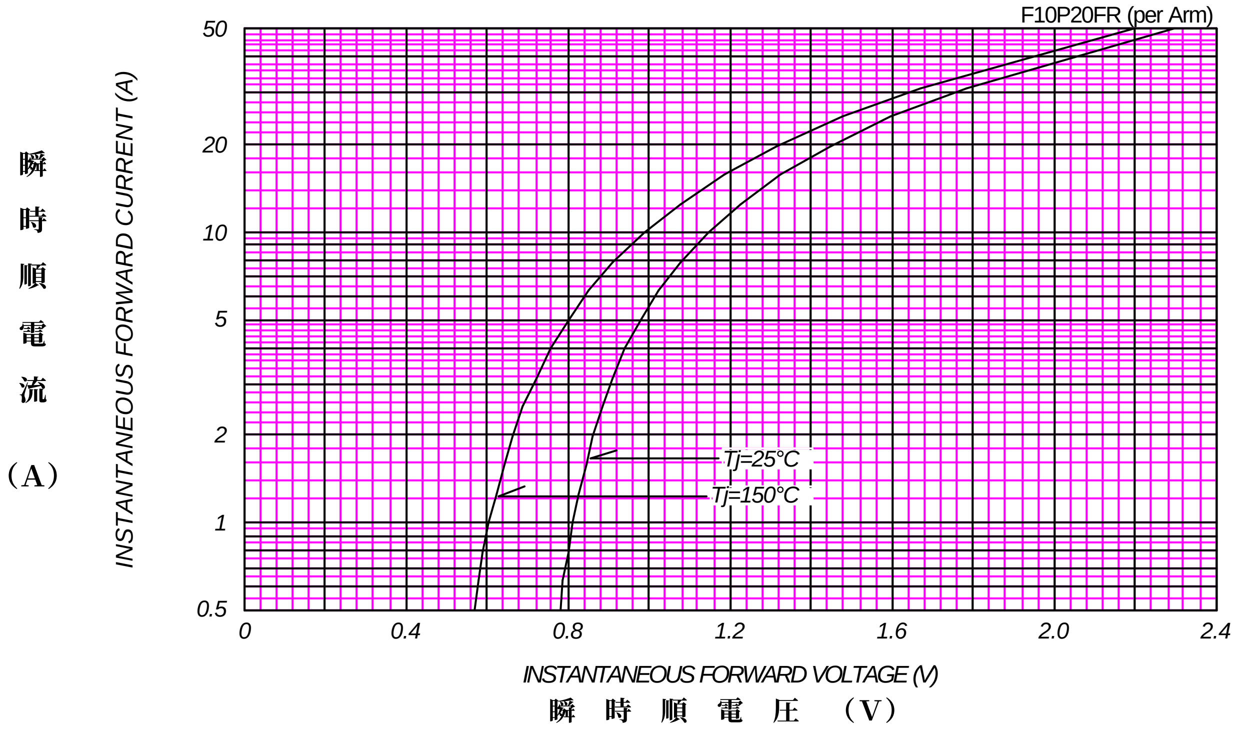
Characteristics	Symbol	Conditions	Min	Typ	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	Tj=25°C,V_{RM}=V_{RRM} per Arm	-	-	20	μA
ピーク順電圧 Peak Forward Voltage	V_{FM}	Tj=25°C,I_{FM}= 5A per Arm	-	-	0.98	V
逆回復時間 Reverse Recovery Time	trr	I_{FM}= 5A, -di/dt= 50 A/μs, Ta= 25°C	-	-	35	ns
熱抵抗 Thermal Resistance	Rth(j-c)	接合部・ケース間 Junction to Case	-	-	3	°C/W
	Rth(c-f)	ケース･フイン間 Case to Fin	-	-	1.5	

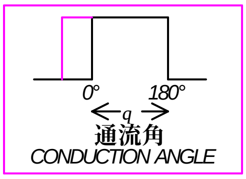
Ｆ１０Ｐ_ＦＲ外形図（mm）



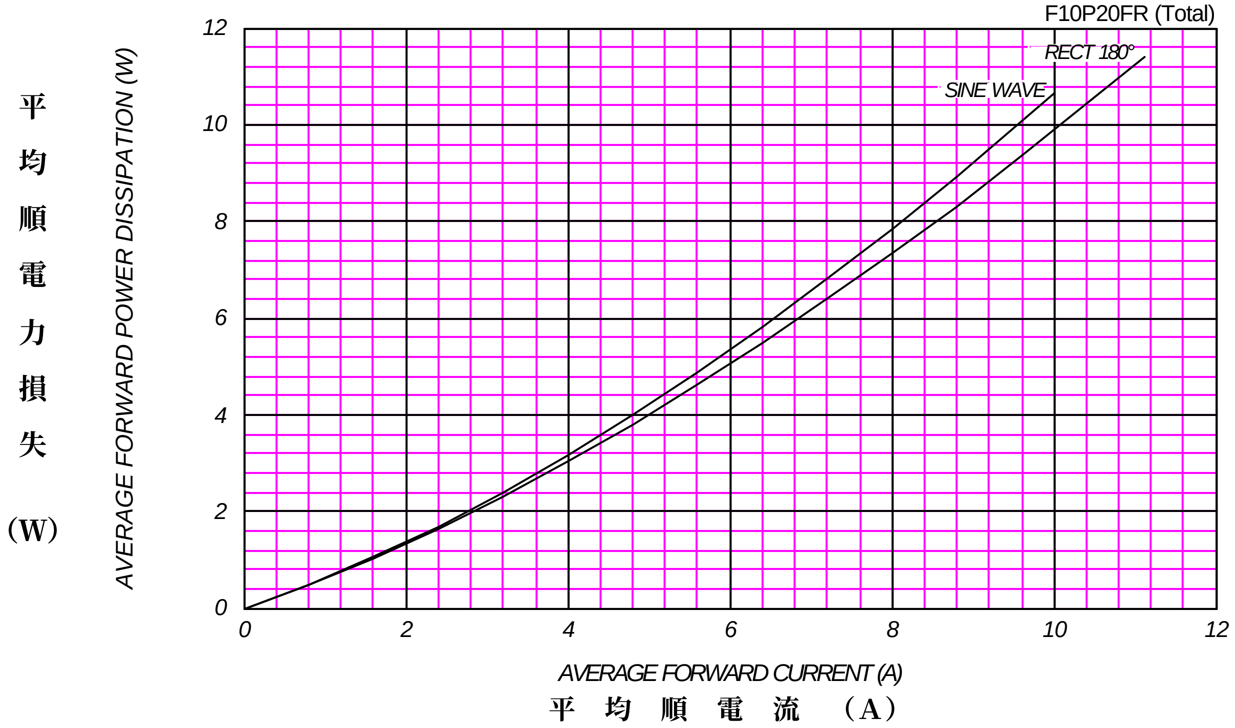


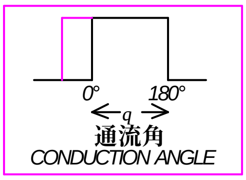
順電圧特性
FORWARD CURRENT VS. VOLTAGE



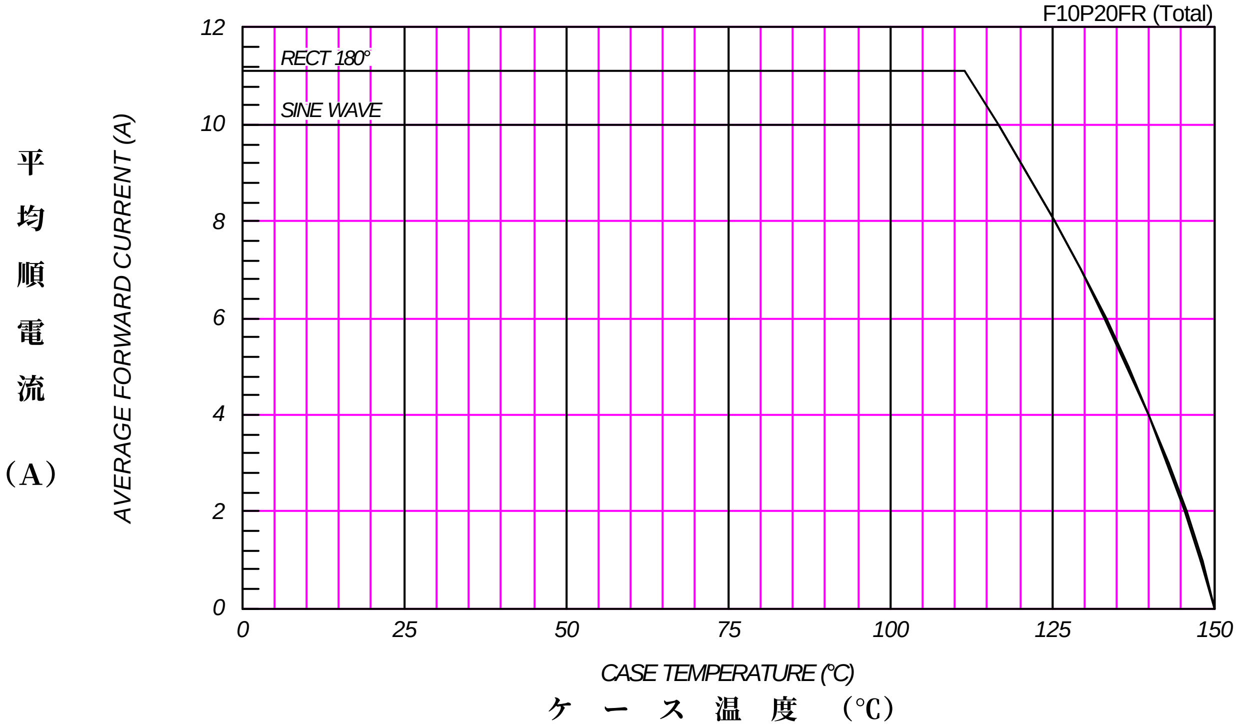


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION





平均順電流－ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格
SURGE CURRENT RATINGS

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