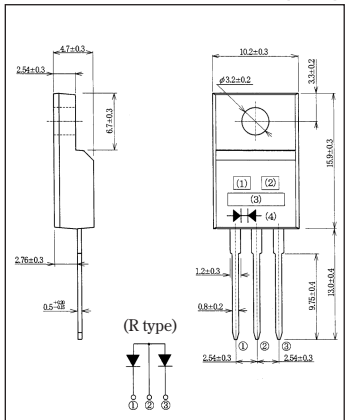
20A Avg. 300 Volts FRED FRU20UC30

■最大定格 Maximum Ratings

Item	Symbol	Conditions			Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}	300			V
平均整流電流 Average Rectified Forward Current	I_O	50Hz、正弦全波抵抗負荷 50Hz Full Sine Wave Resistive Load	Tc=96℃	20	A
実効順電流 R.M.S. Forward Current	$I_{F(RMS)}$	22.2			A
サージ順電流 Surge Forward Current	I_{FSM}	120 50Hz正弦全波，1サイクル，非くり返し 50Hz Full Sine Wave,1cycle, Non-repetitive			A
動作接合温度範囲 Operating Junction Temperature Range	T_{jw}	−40～+150			℃
保存温度範囲 Storage Temperature Range	T_{stg}	−40～+150			℃
締付トルク Mounting torque	F_{tor}	推奨値 Recommended Value		0.5	N·m

■OUTLINE DRAWING(mm)



■APPROX. NET WEIGHT:1.74g

■電気的・熱的特性 Electrical/Thermal Characteristics

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	T_j=25℃, $V_{RM}=V_{RRM}$, 一素子あたり Per Diode	—	—	25	μA
ピーク順電圧 Peak Forward Voltage	V_{FM}	T_j=25℃, I_{FM}=10A, 一素子あたり Per Diode	—	1.10	1.30	V
逆回復時間 Reverse Recovery Time	trr	I_{FM}=10A, -di/dt=50 A/μs, Tj=25℃	—	23	33	ns
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	—	—	2	℃/W
	$R_{th(c-f)}$	ケース・フィン間 Case to Fin	—	—	1.5	℃/W

■定格・特性曲線

FIG.1
順電圧特性
FORWARD CURRENT VS. VOLTAGE

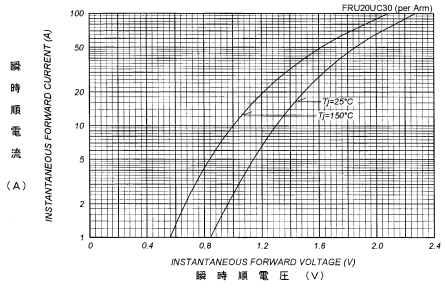


FIG.2
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

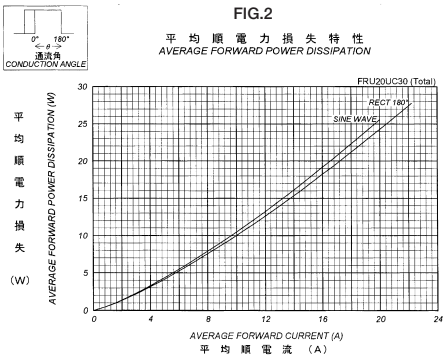


FIG.3
平均順電流－ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

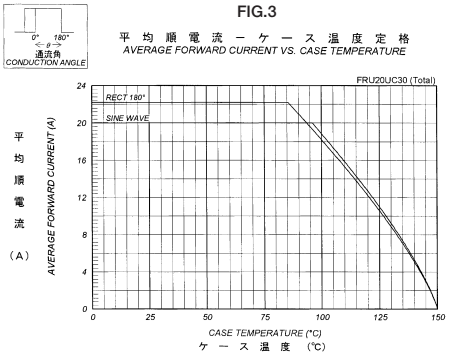


FIG.4
サージ順電流定格
SURGE CURRENT RATINGS
f=50Hz,Harf Sine Wave,Non-Repetitive,No Load

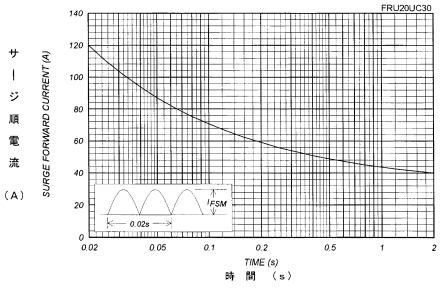
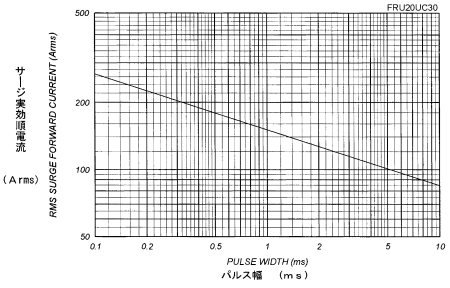



FIG.5
サージ実効順電流定格
RMS SURGE CURRENT RATINGS
Ta=40°C,Non-Repetitive,No Load