

20A Avg.

300 Volts

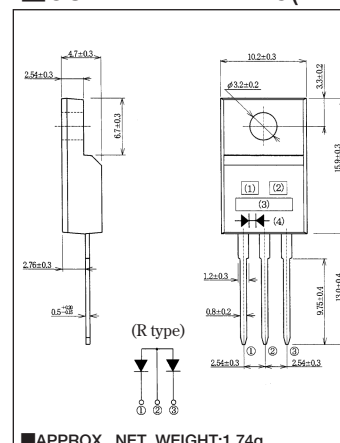
FRED

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	20
実効順電流 R.M.S. Forward Current	$I_F(RMS)$	22.2	A
サーージ順電流 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	°C
保存温度範囲 Storage Temperature Range	T_{stg}	-40~+150	°C
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

電氣的・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}	$T_j=25^{\circ}C$, $V_{RM}=V_{RRM}$, 一素子あたり Per Diode	—	—	25	μA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C$, $I_{FM}=10A$, 一素子あたり Per Diode	—	1.10	1.30	V
逆回復時間 Reverse Recovery Time	t_{rr}	$I_{FM}=10A$, $-di/dt=50 A/\mu s$, $T_j=25^{\circ}C$	—	23	33	ns
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	—	—	2	°C/W
	$R_{th(c-f)}$	ケース・フィン間 Case to Fin	—	—	1.5	°C/W

定格・特性曲線

FIG.1

順電圧特性
FORWARD CURRENT VS. VOLTAGE

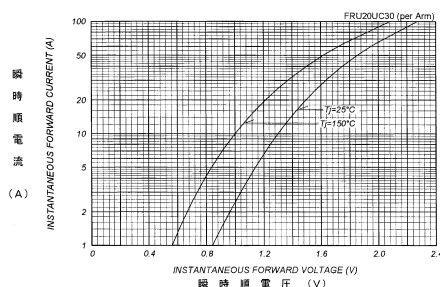


FIG.2

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

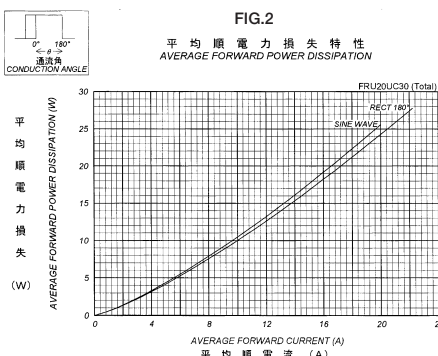


FIG.3

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

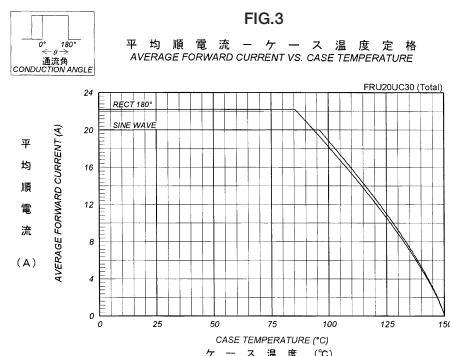


FIG.4

サーージ順電流定格
SURGE CURRENT RATINGS

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

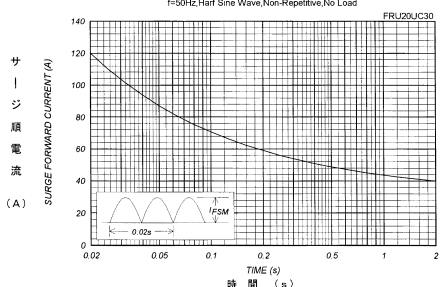


FIG.5

サーージ実効順電流定格
RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

