

10A Avg.

300 Volts

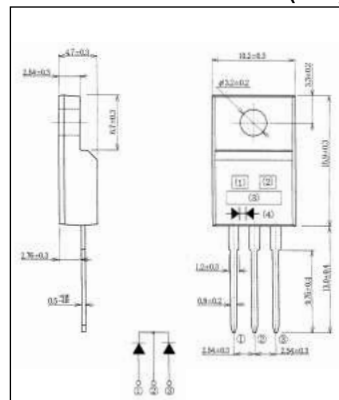
FRED

FCU10UC30

■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, Resistance Load	$T_c=112^{\circ}C$ 10
実効順電流 R.M.S. Forward Current	$I_F(RMS)$	11.1	A
サージ順電流 Surge Forward Current	I_{FSM}	100 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	$^{\circ}C$
保存温度範囲 Storage Temperature Range	T_{stg}	-40~+150	$^{\circ}C$
締付トルク Mounting torque	F_{tor}	推奨値 Recommended Value	0.5 N·m

■OUTLINE DRAWING(mm)



■APPROX. NET WEIGHT:2.2 g

■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}	$T_j=25^{\circ}C, I_{FM}=5A$, 一素子あたり Per Diode	—	1.05	1.25	V
逆回復時間 Reverse Recovery Time	t_{rr}	$I_{FM}=5A, -di/dt=50 A/\mu s, T_j=25^{\circ}C$	—	19	28	ns
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	—	—	3	$^{\circ}C/W$
	$R_{th(c-f)}$	ケース・フィン間 Case to Fin	—	—	1.5	$^{\circ}C/W$

■定格・特性曲線

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

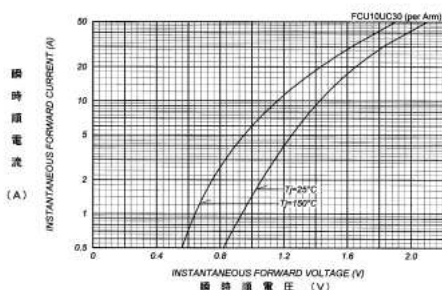


FIG.2
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

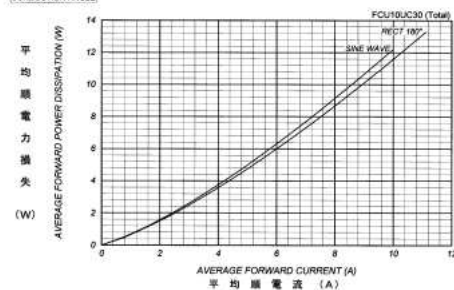


FIG.3
平均順電流-ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

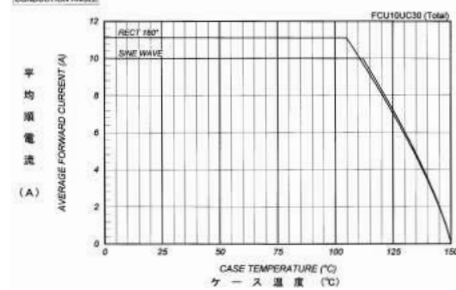


FIG.4
サージ順電流定格
SURGE CURRENT RATINGS

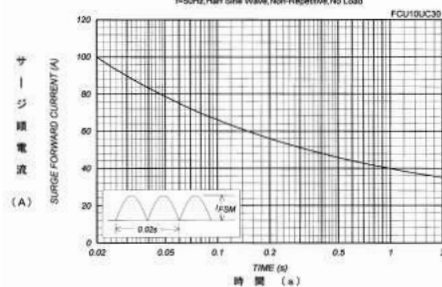


FIG.5
サージ実効順電流定格
RMS SURGE CURRENT RATINGS

