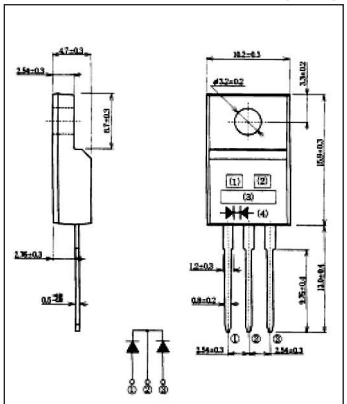
10A Avg. 400 Volts FRED FCU10UC40

■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}	400			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	Tc＝105℃	10	A
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}	80	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:1.8 g

■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	—	—	30	μA
ピーク順電圧 Peak Forward Voltage	V_{FM}	T_j＝25℃, I_{FM}＝5A, 一素子あたり Per Diode	—	1.30	1.50	V
逆回復時間 Reverse Recovery Time	trr	I_{FM}＝5A, -di/dt＝50 A/μs, Tj＝25℃	—	20	30	ns
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	—	—	3	℃/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

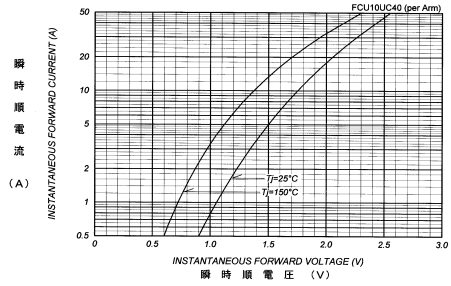


FIG.2
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

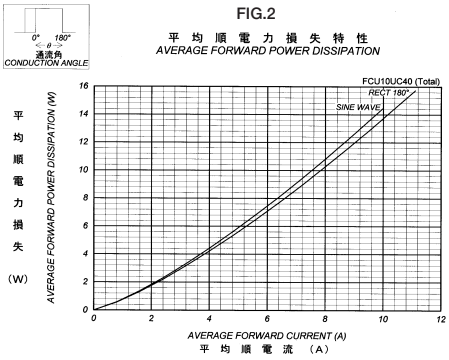


FIG.3
平均順電流－ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

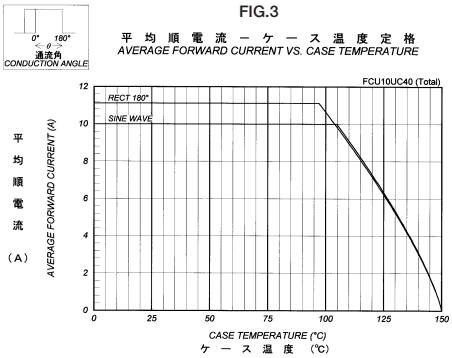


FIG.4
サージ順電流定格
SURGE CURRENT RATINGS

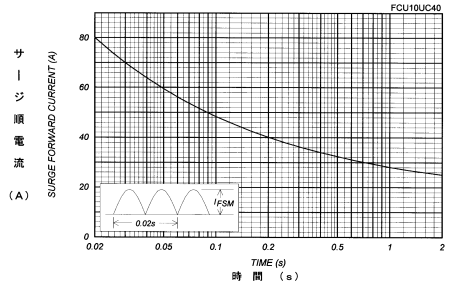
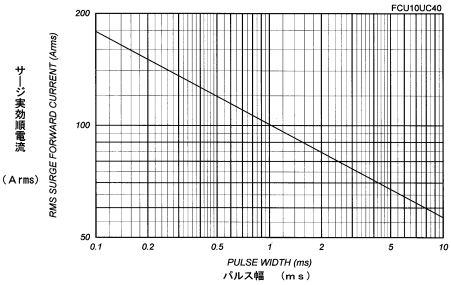



FIG.5
サージ実効順電流定格
RMS SURGE CURRENT RATINGS