

3A Avg.

400 Volts

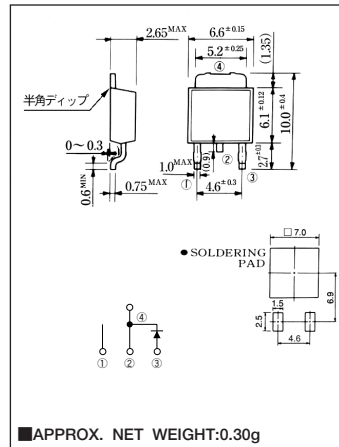
FRED

ESU03A40-F

■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	$T_c=121^\circ\text{C}$ Tc: Case Temperature	3.0
		$T_a=27^\circ\text{C}^*$	1.3
実効順電流 R.M.S. Forward Current	$I_F(\text{RMS})$	4.71	A
サージ順電流 Surge Forward Current	I_{FSM}	45 50Hz正弦半波, 1サイクル, 非くり返し 50Hz Half Sine Wave, 1cycle, Non-repetitive	A
動作接合温度範囲 Operating Junction Temperature Range	T_{jw}	-40~+150	$^\circ\text{C}$
保存温度範囲 Storage Temperature Range	T_{stg}	-40~+150	$^\circ\text{C}$

■OUTLINE DRAWING(mm)



■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}	$T_j=25^\circ\text{C}, V_{RM}=V_{RRM}$	—	—	20	μA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$T_j=25^\circ\text{C}, I_{FM}=3\text{A}$	—	1.37	1.55	V
逆回復時間 Reverse Recovery Time	trr	$I_{FM}=3\text{A}, -di/dt=50\text{A}/\mu\text{s}, T_j=25^\circ\text{C}$	—	18	30	ns
熱抵抗 Thermal Resistance	$R_{th(j-a)}$	接合部・周囲間 Junction to Ambient	—	—	80	$^\circ\text{C}/\text{W}$
	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	—	—	6	$^\circ\text{C}/\text{W}$

* Print Land = 20×20 mm

■定格・特性曲線

FIG.1

順電圧特性
FORWARD CURRENT VS. VOLTAGE

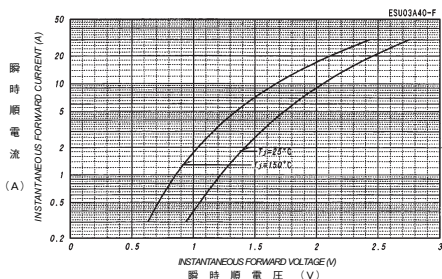


FIG.2

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

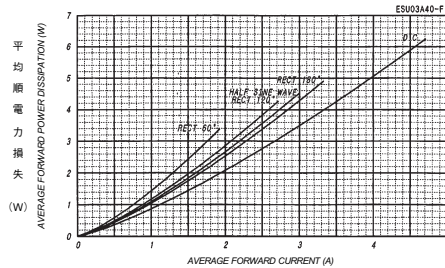


FIG.3

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

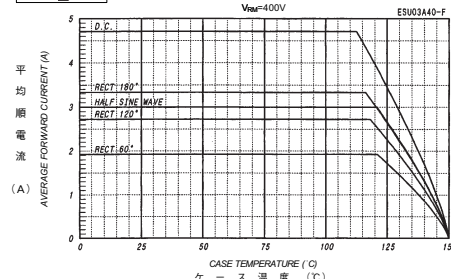


FIG.4

平均順電流-周囲温度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE
P.C. Board mounted (Print Land=20×20mm)

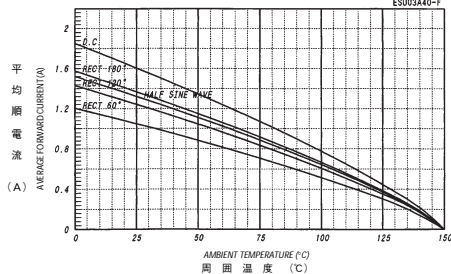


FIG.5

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

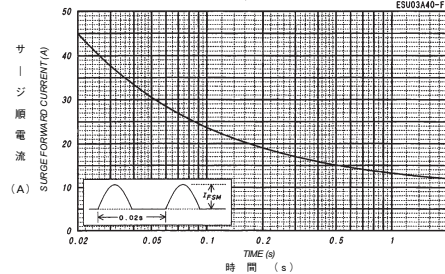


FIG.6

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

