

3A Avg.

400 Volts

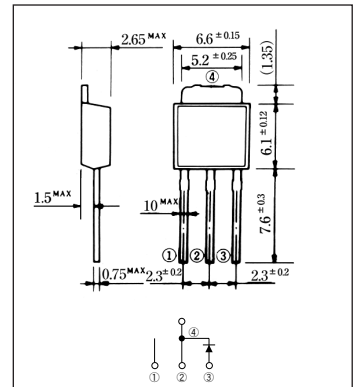
FRED

ESU03A40

■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	A
動作接合温度範囲 Operating Junction Temperature Range	T_{jw}	50Hz正弦半波, 1サイクル, 非くり返し 50Hz Half Sine Wave, 1cycle, Non-repetitive	-40~+150
保存温度範囲 Storage Temperature Range	T_{stg}		-40~+150

■OUTLINE DRAWING(mm)



■APPROX. NET WEIGHT:0.35 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}	$T_j=25^\circ\text{C}, V_{RM}=V_{RRM}$	—	—	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

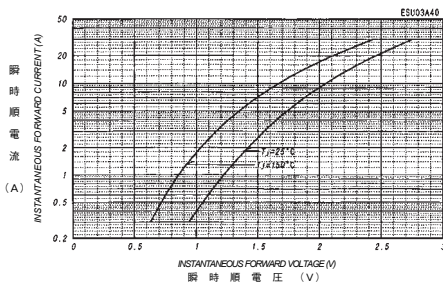


FIG.2

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

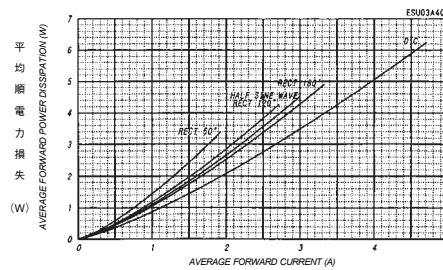


FIG.3

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

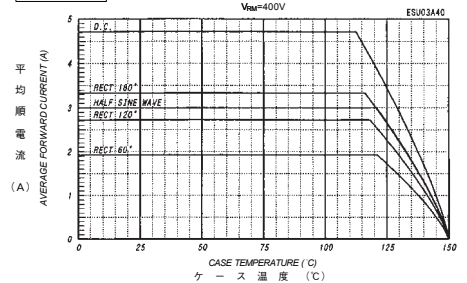


FIG.4

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)

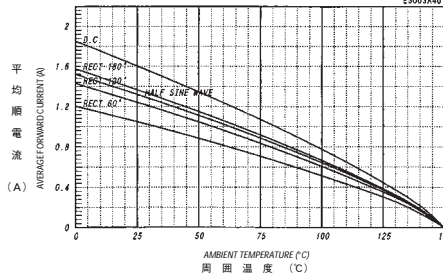


FIG.5

サージ順電流定格
SURGE CURRENT RATINGS
1/50Hz Sine Wave, Non-Repetitive, No Load

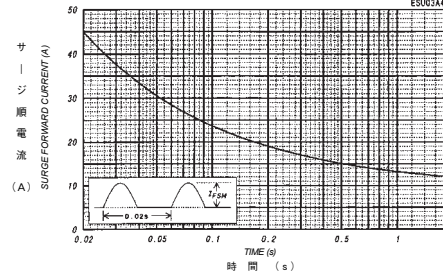


FIG.6

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

