

3A Avg.

100 Volts

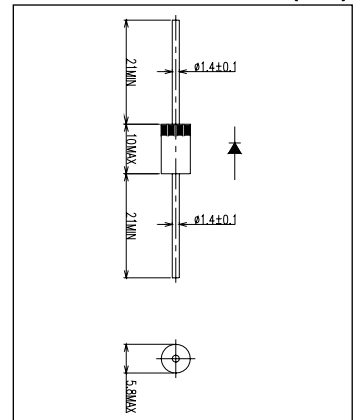
SBD

31DQ10

■最大定格 Maximum Ratings

Item	Symbol	Conditions	Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
平均整流電流 Average Rectified Forward Current	$I_O$	50Hz, 正弦半波通電抵抗負荷 50Hz Half Sine Wave Resistive Load	$T_a=26^{\circ}C^{*1}$ 1.7 $T_a=59^{\circ}C^{*2}$ 3.0
実効順電流 R.M.S. Forward Current	$I_F(RMS)$	4.71	A
サージ順電流 Surge Forward Current	$I_{FSM}$	100 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	$^{\circ}C$
保存温度範囲 Storage Temperature Range	$T_{stg}$	-40~+150	$^{\circ}C$

■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	$I_{RM}$	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$	—	—	1	mA
ピーク順電圧 Peak Forward Voltage	$V_{FM}$	$T_j=25^{\circ}C, I_{FM}=3A$	—	—	0.85	V
熱抵抗 Thermal Resistance	$R_{th(j-a)}$	接合部・周囲間 Junction to Ambient	—	—	80	$^{\circ}C/W$
			—	—	34	$^{\circ}C/W$

\*1: 単体フィン無し / Without Fin or P.C. Board

\*2: 銅板フィン付き(両側) / With Cu Fin (20×20×1t, L=5mm, Both Sides)

■定格・特性曲線

FIG.1

順電圧特性  
FORWARD CURRENT VS. VOLTAGE

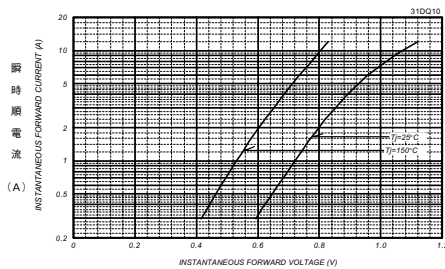


FIG.2

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

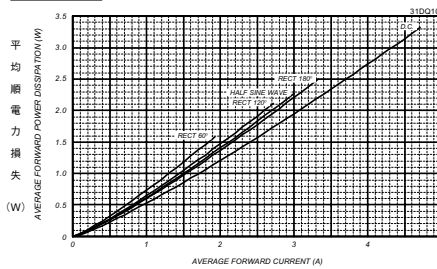


FIG.3

ピーク逆電流 - ピーク逆電圧特性  
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

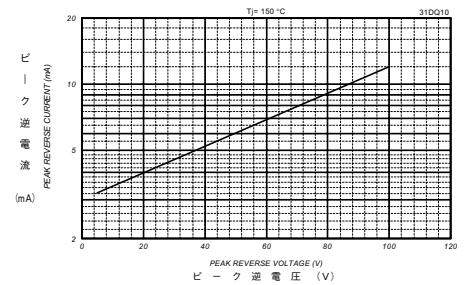


FIG.4

平均逆電力損失  
AVERAGE REVERSE POWER DISSIPATION

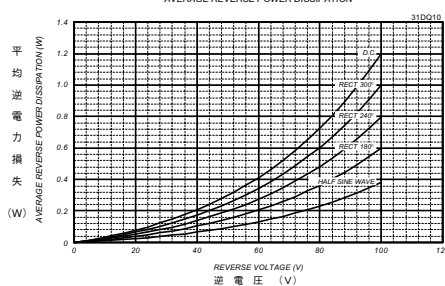


FIG.5

平均順電流 - 周囲温度定格  
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

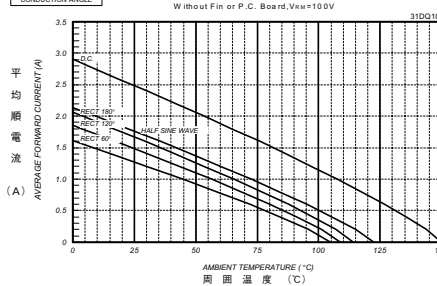


FIG.6

平均順電流 - 周囲温度定格  
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

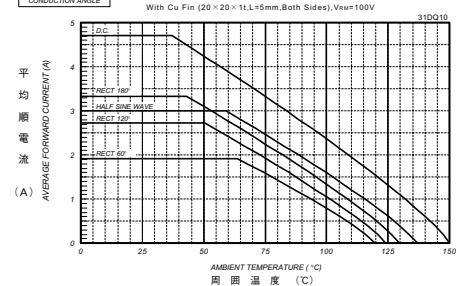


FIG.7

サージ順電流定格  
SURGE CURRENT RATINGS

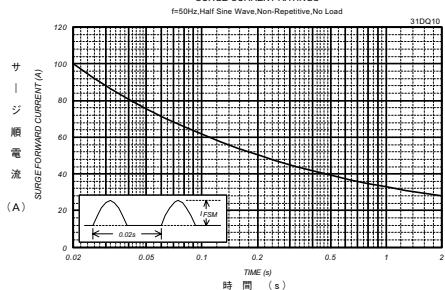


FIG.8

接合容量特性  
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

