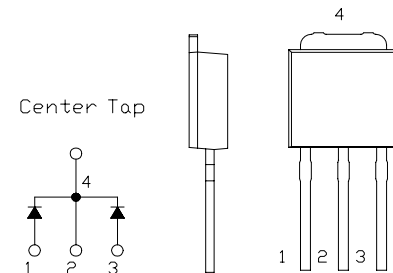


10A 40V
SBD Type : ECQ10A04

OUTLINE DRAWING

構造 : ショットキーバリアダイオード(SBD)
 Construction: Schottky barrier Diode
 カソード コモン型

用途 : 高周波整流用
 Application : High Frequency Rectification


最大定格 / Maximum Ratings

Approx Net Weight:0.35g

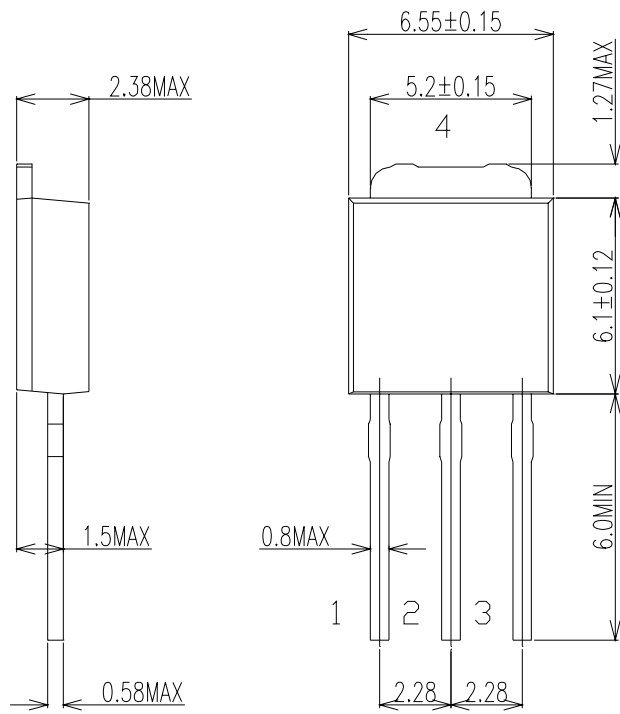
Rating	Symbol	ECQ10A04		Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}	40		V
平均整流電流 Average Rectified Output Current	I_O	10.0	$T_c=105$ 50 Hz, 正弦全波通電、抵抗負荷 Full Sine Wave Resistive Load	A
		2.0	同上 基盤実装時 P.C.Board mounted*	
実効順電流 RMS Forward Current	$I_{F(RMS)}$	11.1		A
サージ順電流 Surge Forward Current	I_{FSM}	100	50 Hz 正弦全波, 1サイクル, 非くり返し 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		

電氣的・熱的特性 / Electrical · Thermal Characteristics

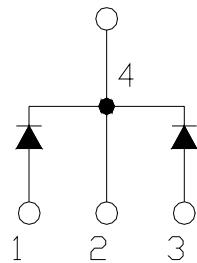
Characteristics	Symbol	Conditions	Min	Typ	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	$T_j=25$, $V_{RM}=V_{RRM}$ per Diode	-	-	3	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$T_j=25$, $I_{FM}=5A$ per Diode	-	-	0.55	V
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	-	-	4	/W
	$R_{th(j-a)}$	接合部・周囲間 (基盤実装時) Junction to Ambient (with P.C.Board mounted*)			80	

* : Print land 20x20

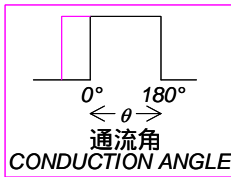
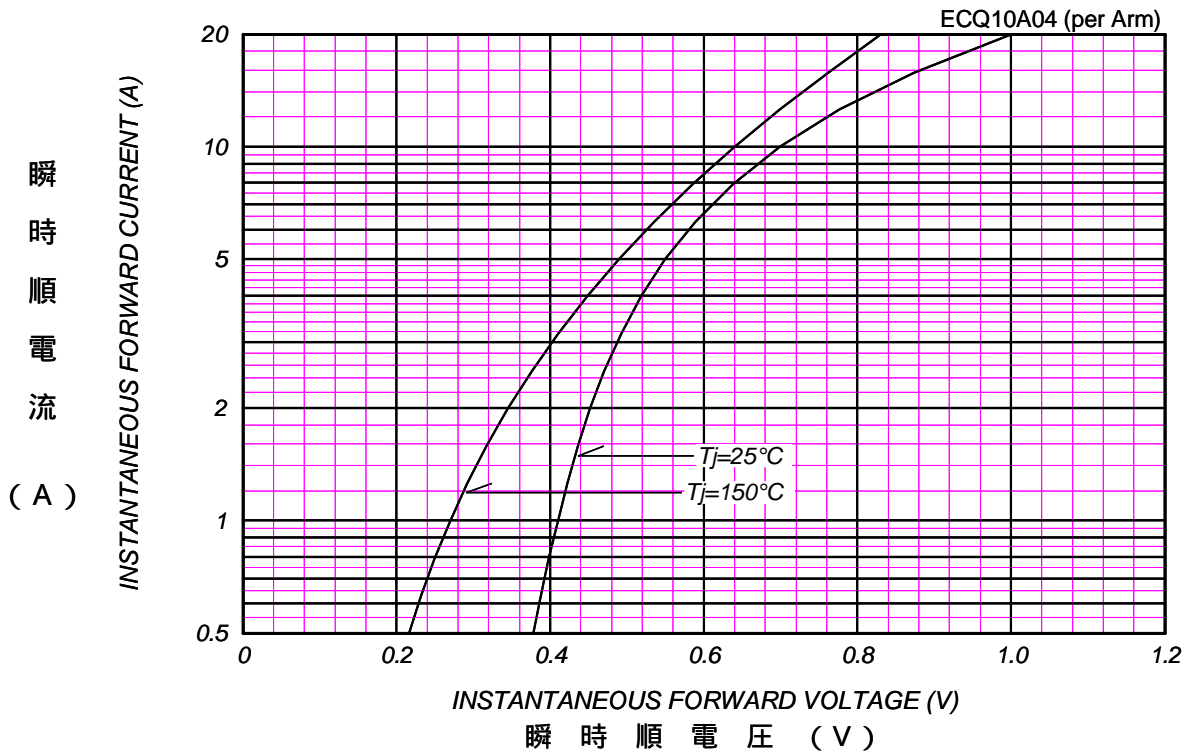
ECQ10A *外形図 (mm)



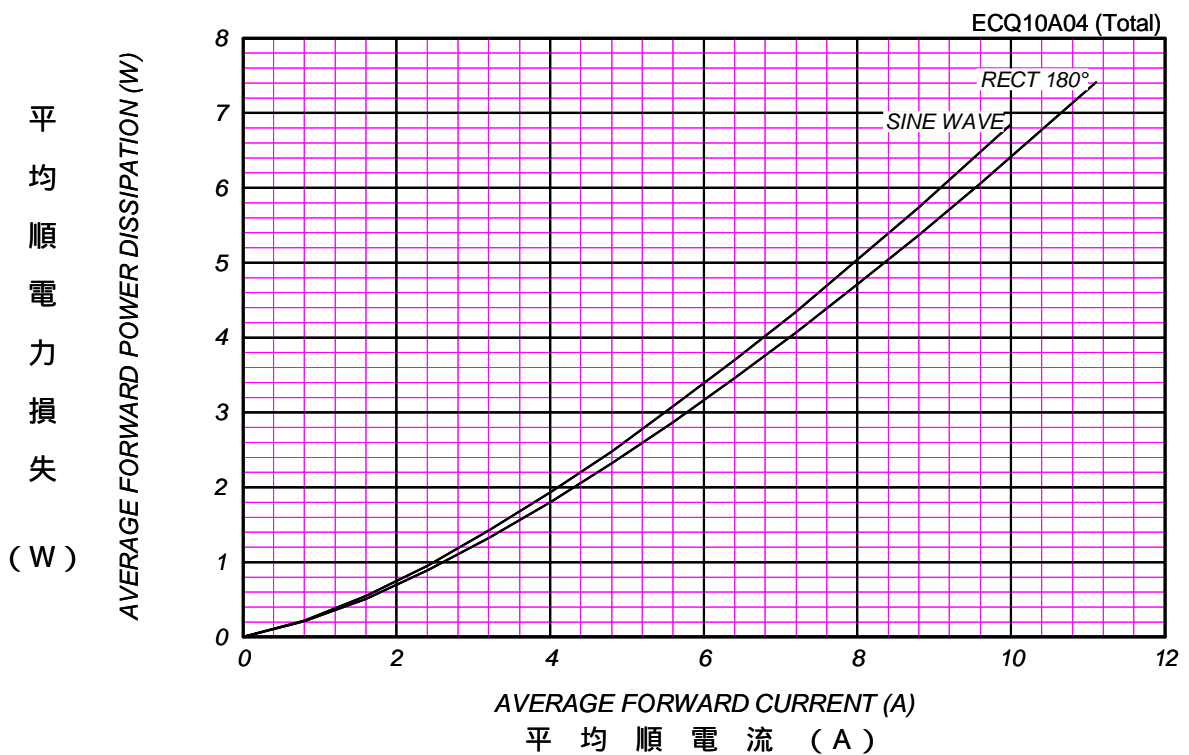
Center Tap



順電壓特性
FORWARD CURRENT VS. VOLTAGE

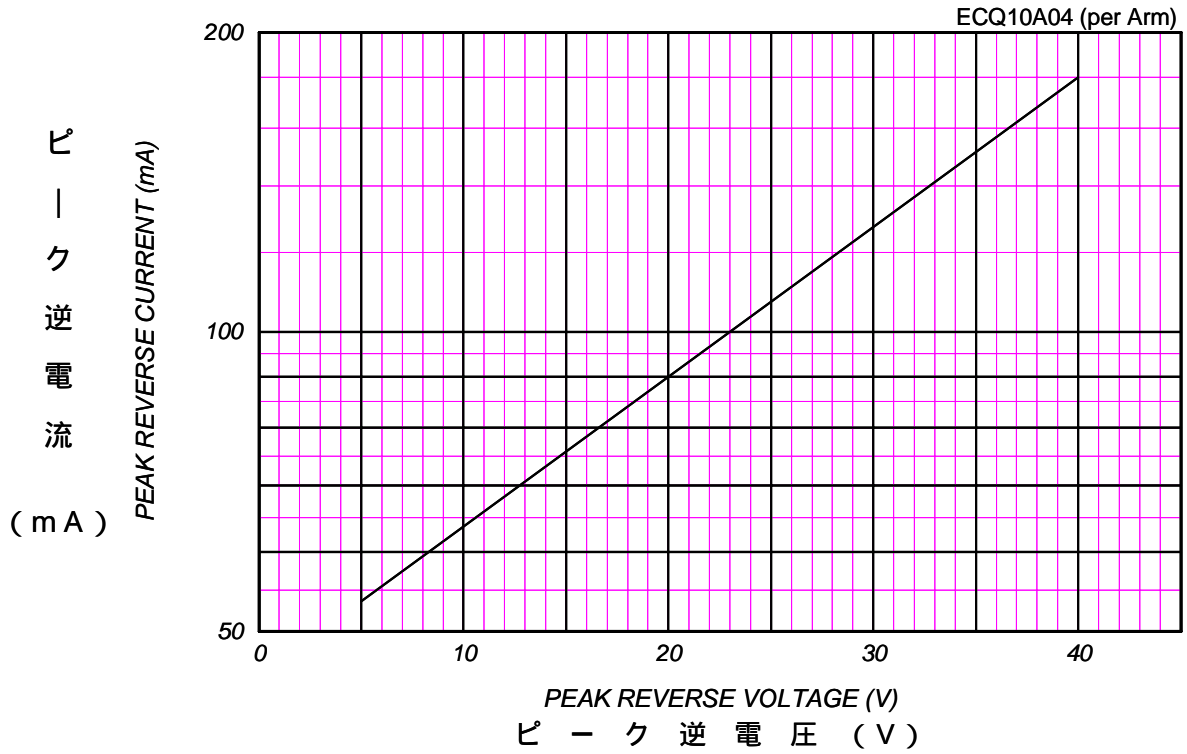


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

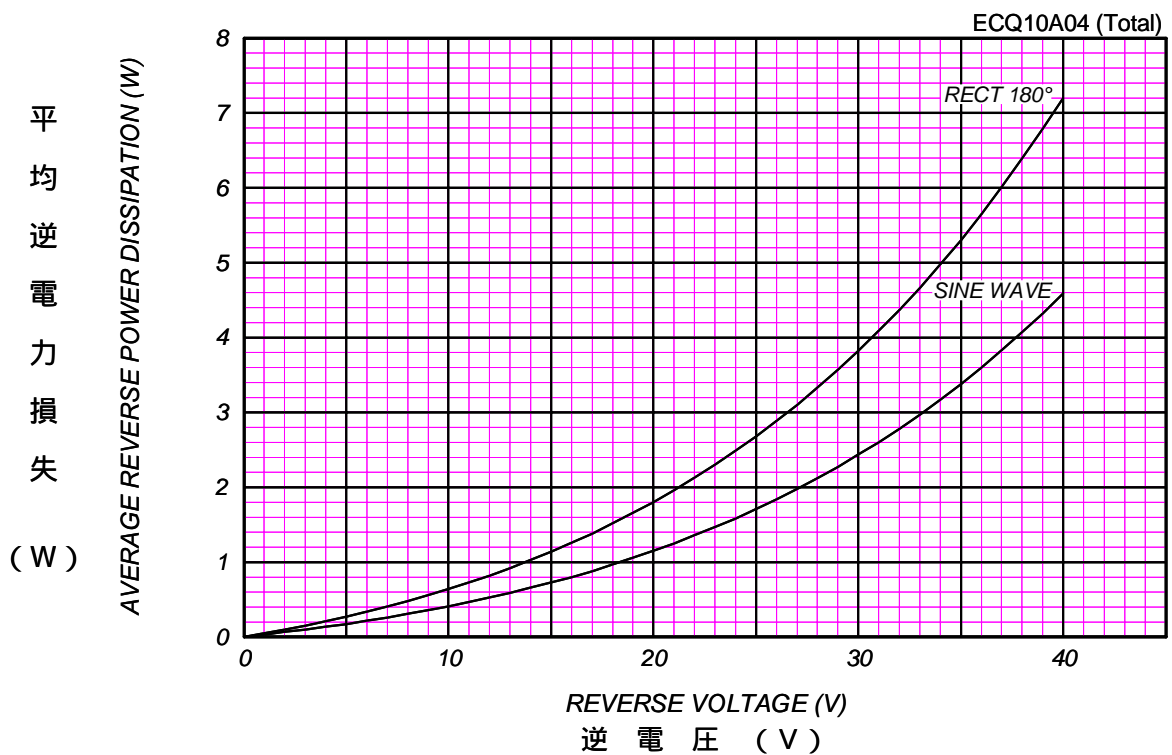


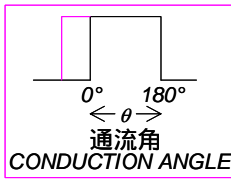
ピーク逆電流 - ピーク逆電圧特性
 PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

T_j = 150 °C



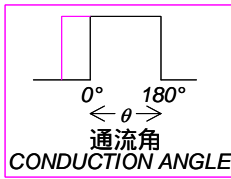
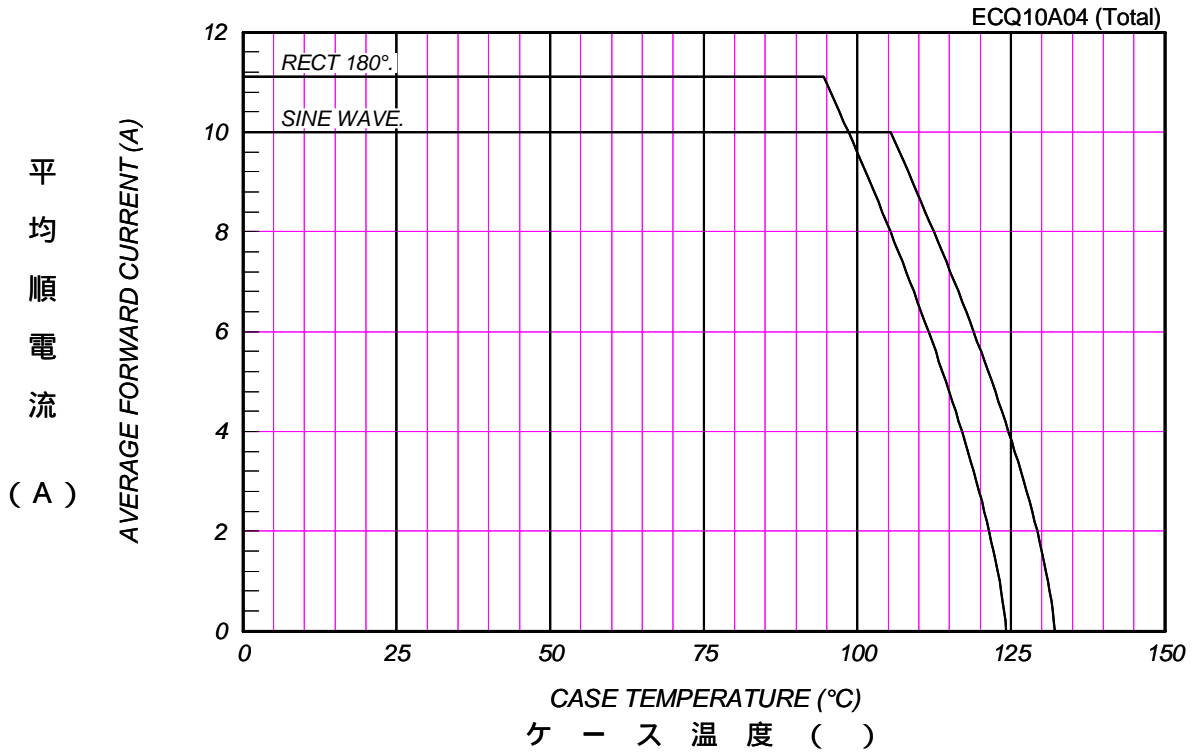
平均逆電力損失
 AVERAGE REVERSE POWER DISSIPATION





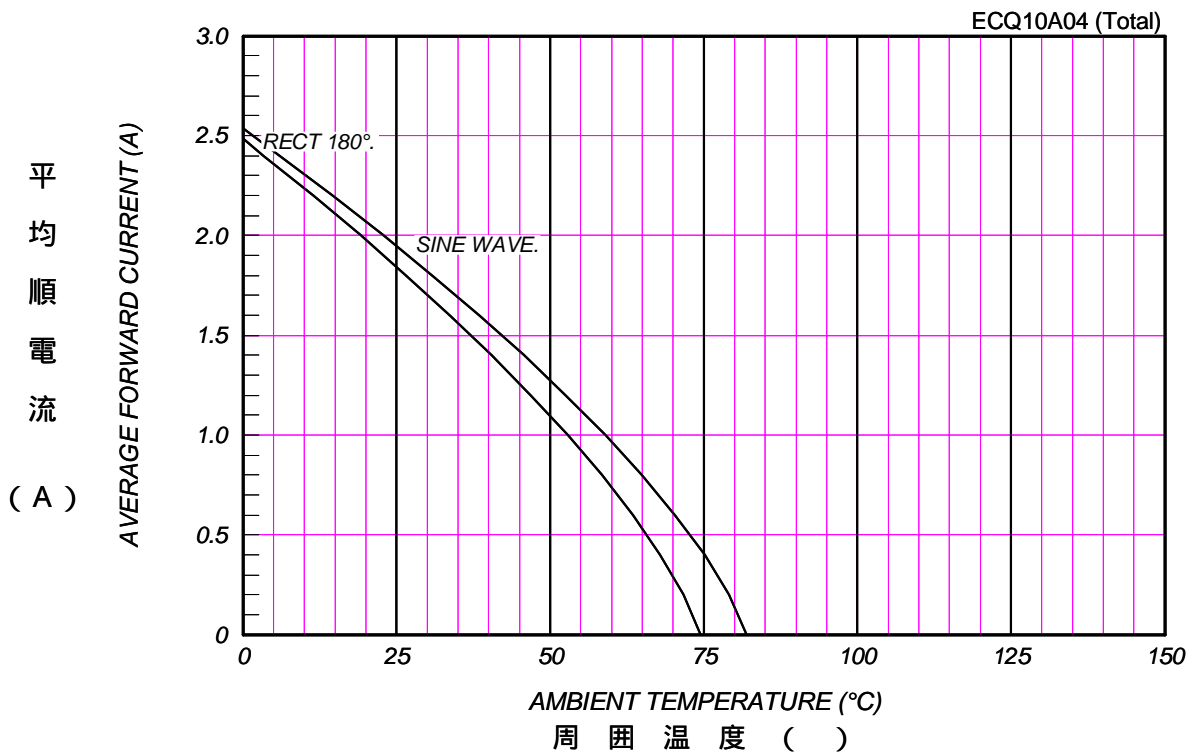
平均順電流 - ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$



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

$V_{RM}=40V, P.C$ Board mounted



サージ順電流定格 SURGE CURRENT RATINGS

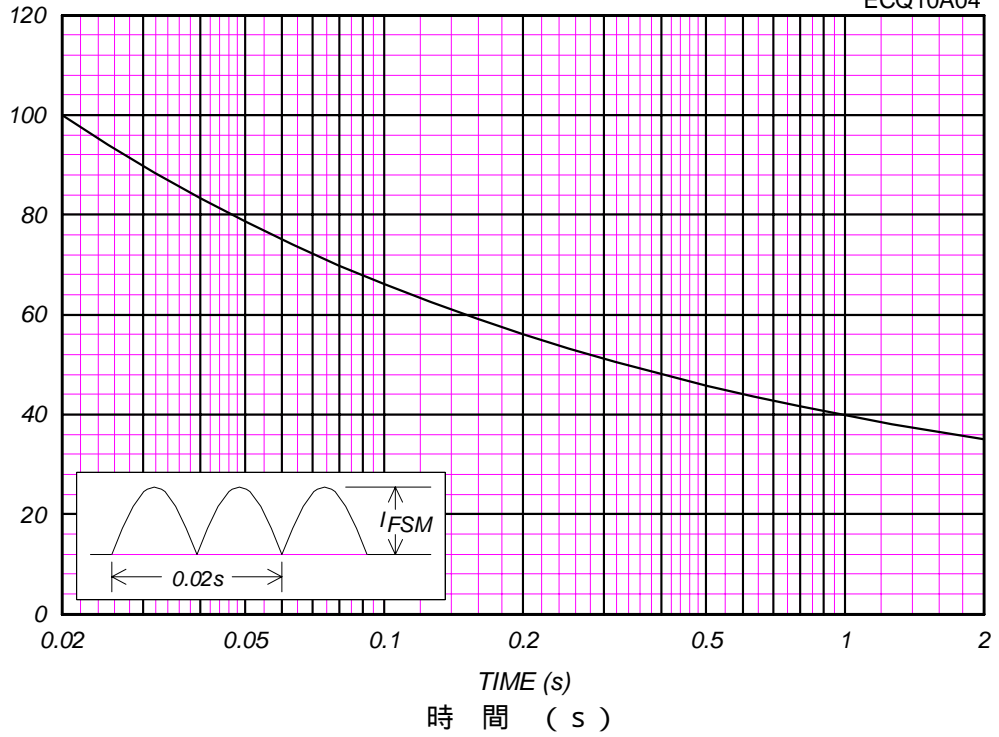
f=50Hz,Sine Wave,Non-Repetitive,No Load

ECQ10A04

サ
ー
ジ
順
電
流

(A)

SURGE FORWARD CURRENT (A)



接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

T_j=25°C,V_m=20mV_{RMS},f=100kHz,Typical Value

ECQ10A04 (per Arm)

接
合
容
量

(pF)

JUNCTION CAPACITANCE (pF)

