

SBD Type : EC10QS04

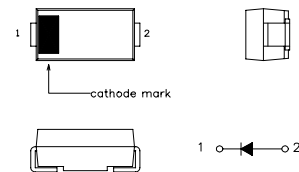
■ OUTLINE DRAWING

構造 : 表面実装型、ショットキバリアダイオード (SBD)

Construction: Surface Mounting, Schottky Barrier Diode

用途 : 高周波整流用

Application : High Frequency Rectification



■ 最大定格 / Maximum Ratings

Approx Net Weight:0.06g

Rating	Symbol	EC10QS04			Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V _{RRM}	40			V
非くり返しピーク逆電圧 Non-repetitive Peak Reverse Voltage	V _{RSM}	45			V
平均整流電流 Average Rectified Output Current	I _O	0.91	Ta=28 *1	50 Hz、正弦半波通電 Half Sine Wave	A
		1.0	Ta=53 *2	抵抗負荷 Resistive Load	A
実効順電流 RMS Forward Current	I _{F(RMS)}	1.57			A
サージ順電流 Surge Forward Current	I _{FSM}	20	50 Hz 正弦半波, 1サイクル, 非くり返し Half 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			

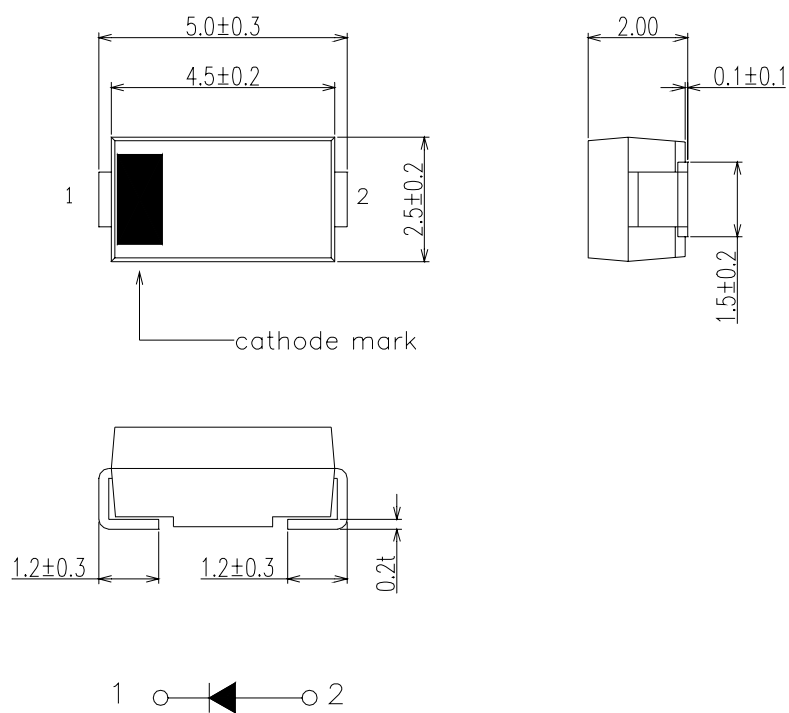
■ 電氣的・熱的特性 / Electrical・Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	Tj=25 , $V_{RM} = V_{RRM}$	-	-	1	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	Tj=25 , $I_{FM} = 1 A$	-	-	0.55	V
熱抵抗(接合部・周囲間) Thermal Resistance (Junction to Ambient)	Rth(j-a)	Glass Epoxy Substrate Mounted *1	-	-	157	/W
		Alumina Substrate Mounted *2	-	-	108	/W

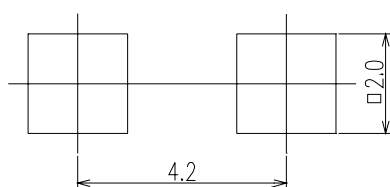
*1: プリント基板実装/Glass-Epoxy Substrate mounted (Soldering Lands= 2 × 2 mm , Both Sides)

*2: アルミナ基板実装/Alumina Substrate mounted (Soldering Lands= 2 × 2 mm , Both Sides)

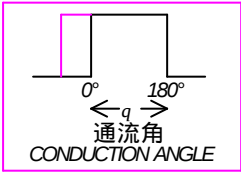
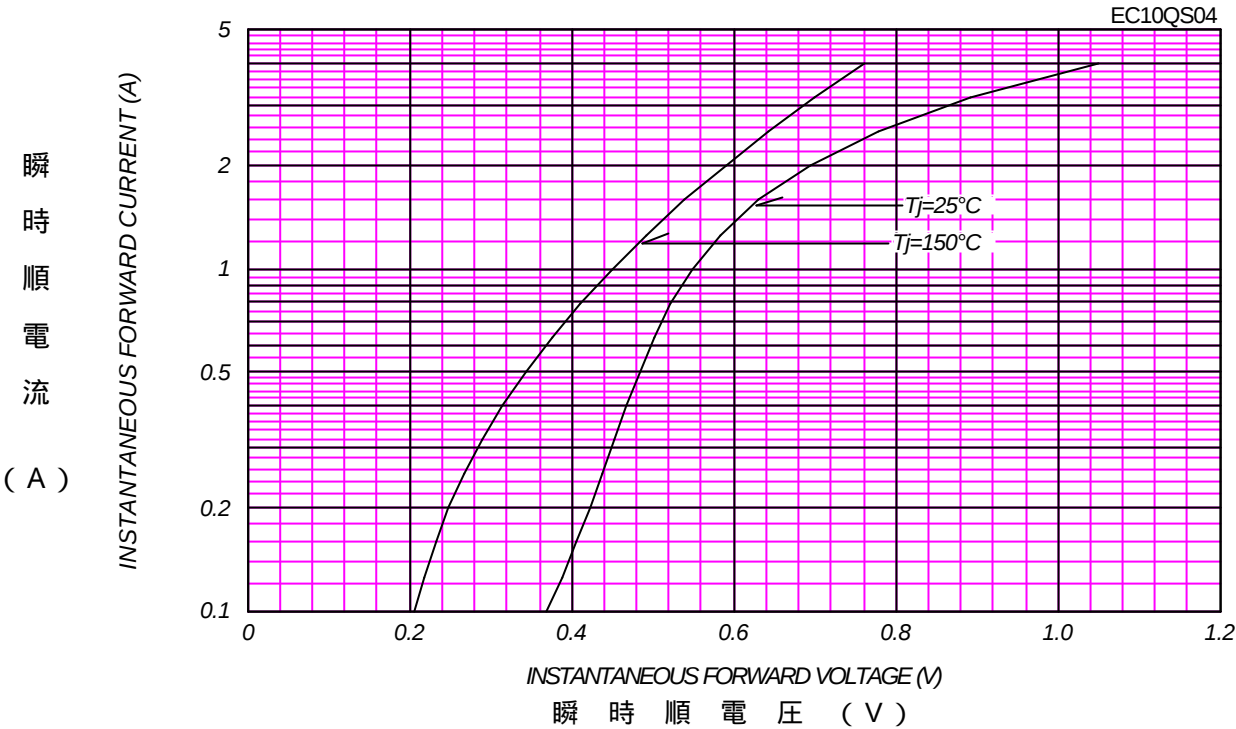
EC10QS04外形図 (mm)



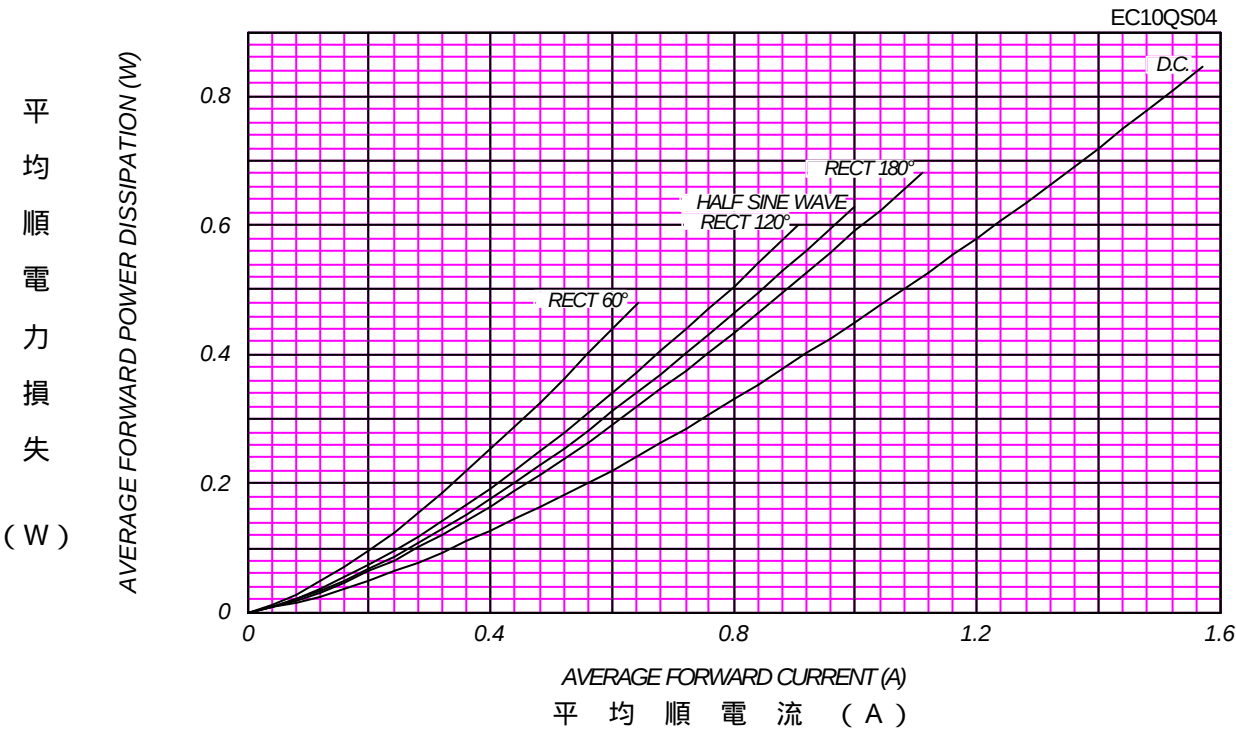
SOLDERING PAD



順電壓特性
FORWARD CURRENT VS. VOLTAGE



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

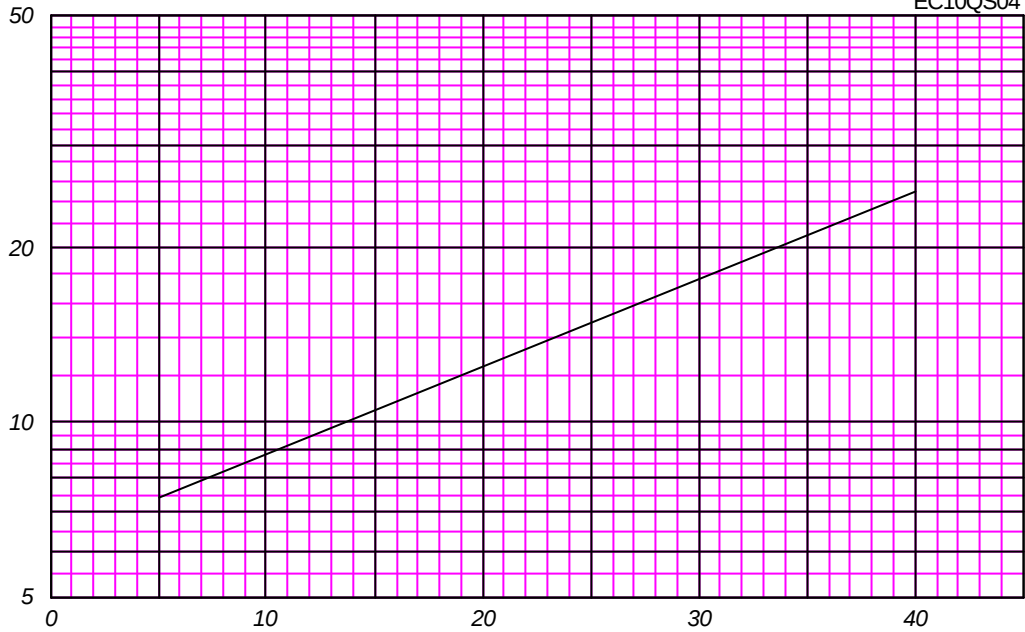


ピーク逆電流 - ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C

EC10QS04

ピーク逆電流
(mA)

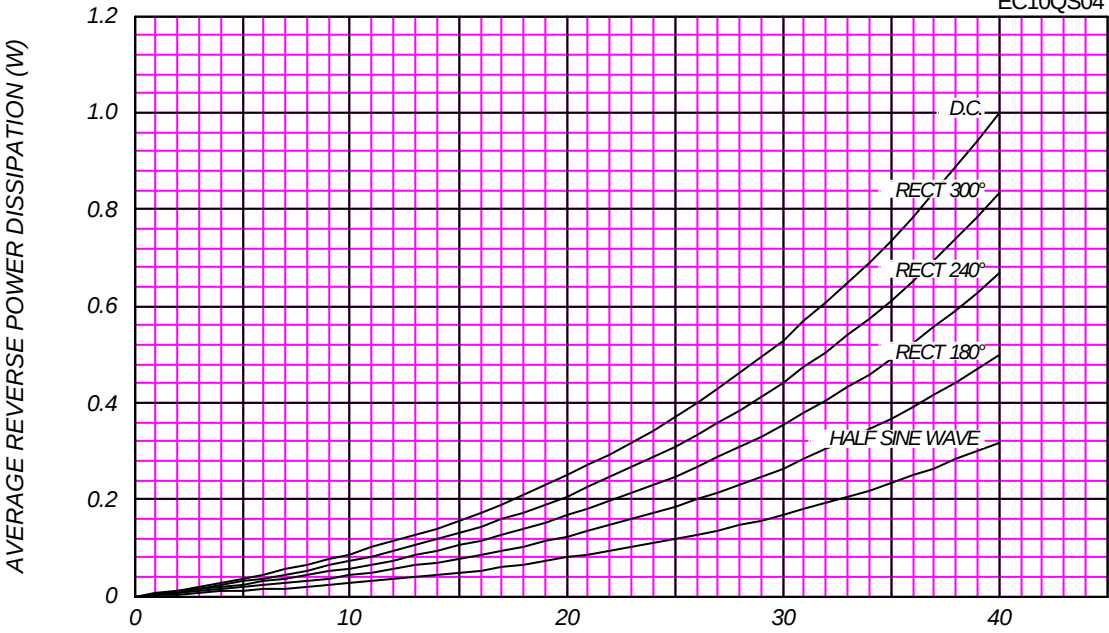


ピーク逆電圧 (V)

平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION

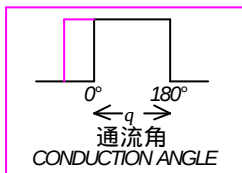
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平均逆電力損失
(W)



REVERSE VOLTAGE (V)

逆電圧 (V)

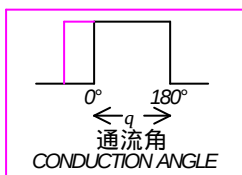
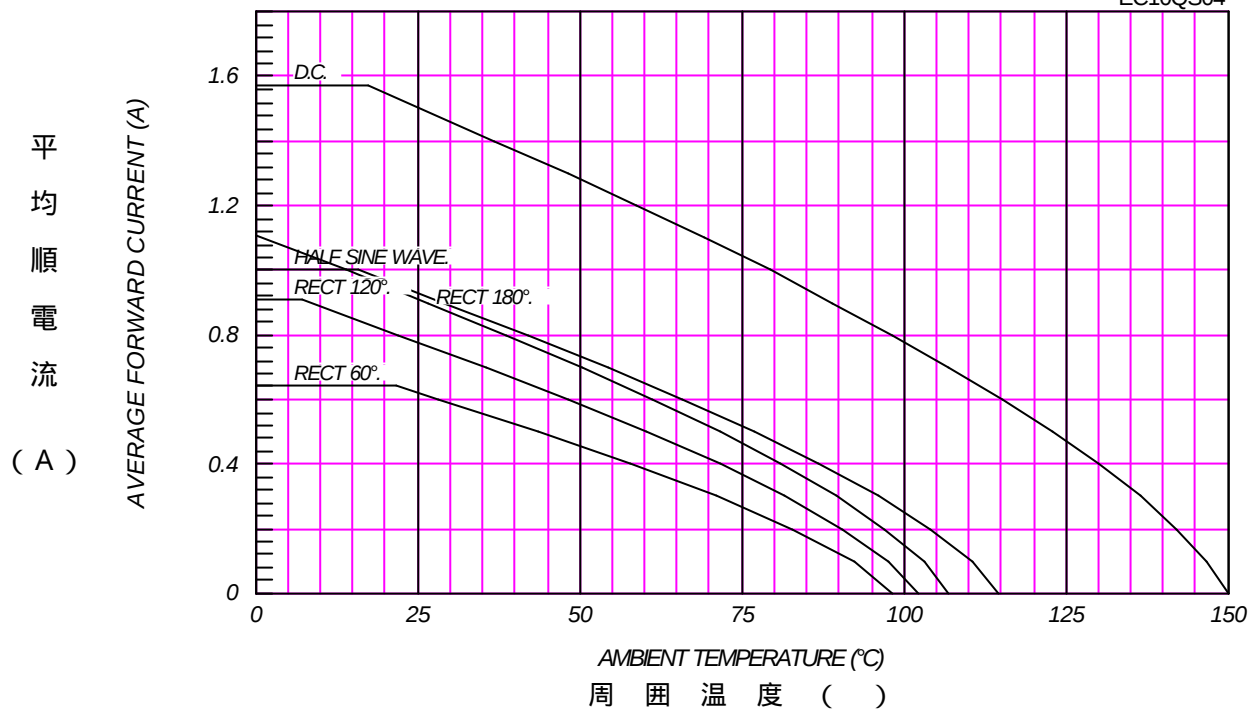


平均順電流 - 周圍溫度定格

AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate Mounted(Land=2×2mm),V_{RM}=40V

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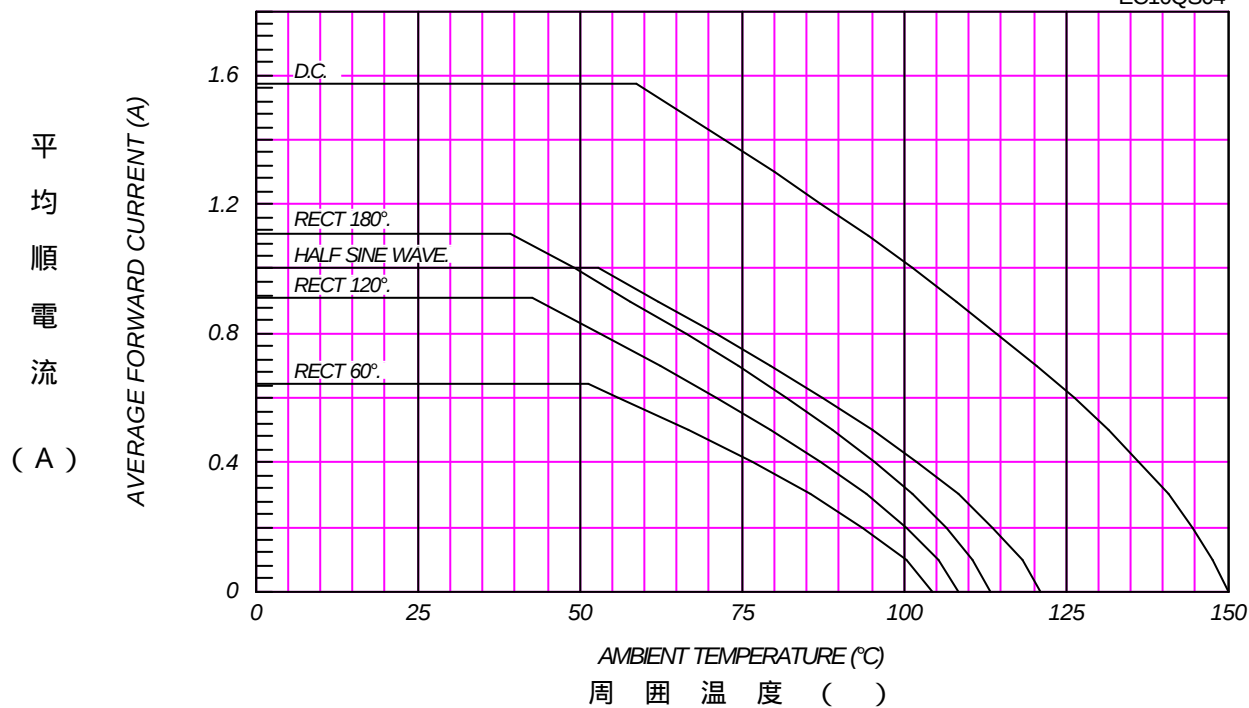


平均順電流 - 周圍溫度定格

AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted(Land=2×2mm),V_{RM}=40V

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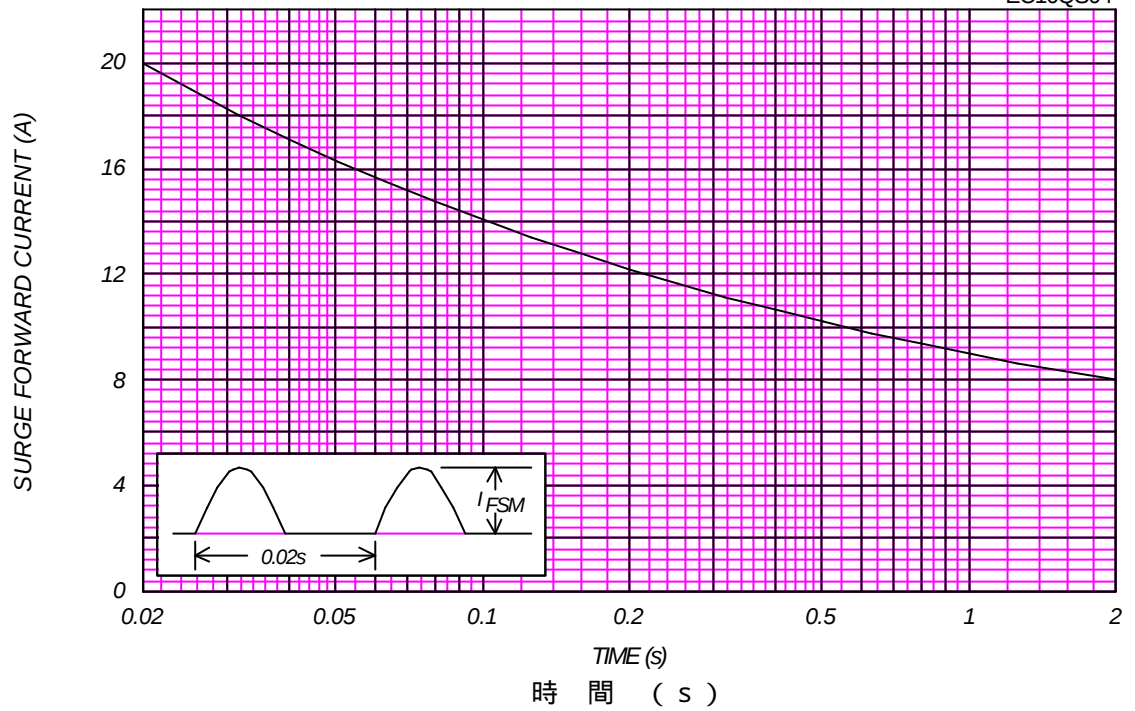
サージ順電流定格 SURGE CURRENT RATINGS

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

EC10QS04

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順
電
流

(A)



接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25°C, Vm=20mV_{RMS}, f=100kHz, Typical Value

EC10QS04

接
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量

(pF)

