

SBD Type : EC10QS03L

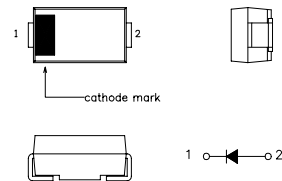
■ OUTLINE DRAWING

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	EC10QS03L		Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}	30		V
平均整流電流 Average Rectified Output Current	I_0	1.0	Ta=28 *1 50 Hz、正弦半波通電 Half Sine Wave	A
		1.0	Ta=58 *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	Tjw	- 40 ~ + 150		
保存温度範囲 Storage Temperature Range	Tstg	- 40 ~ + 150		

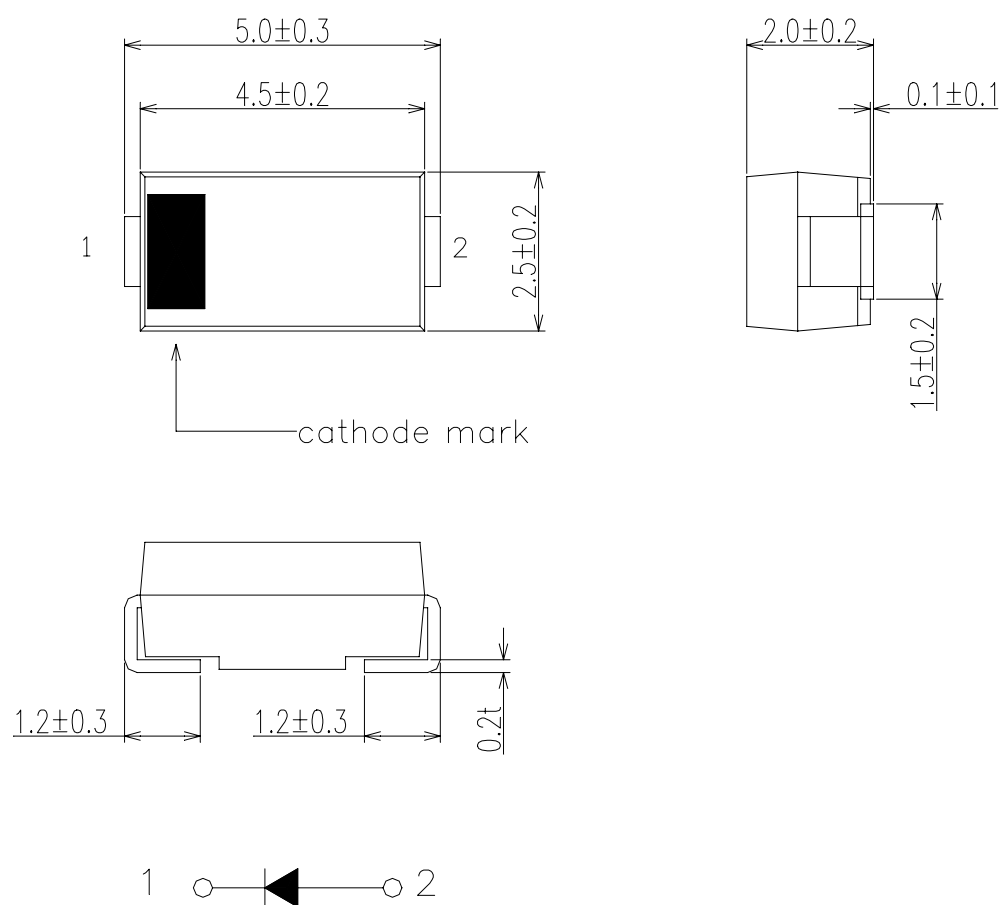
■ 電氣的・熱的特性 / Electrical・Thermal Characteristics

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 , $I_{FM} = 1 A$	-	-	0.45	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

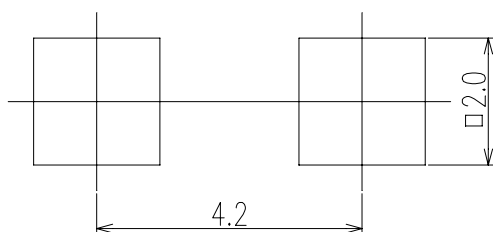
*1: プリント基板実装 / Glass-Epoxy Substrate mounted (Soldering Lands= 2 × 2 mm , Both Sides)

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

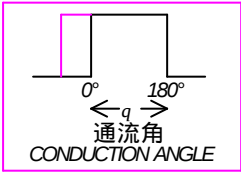
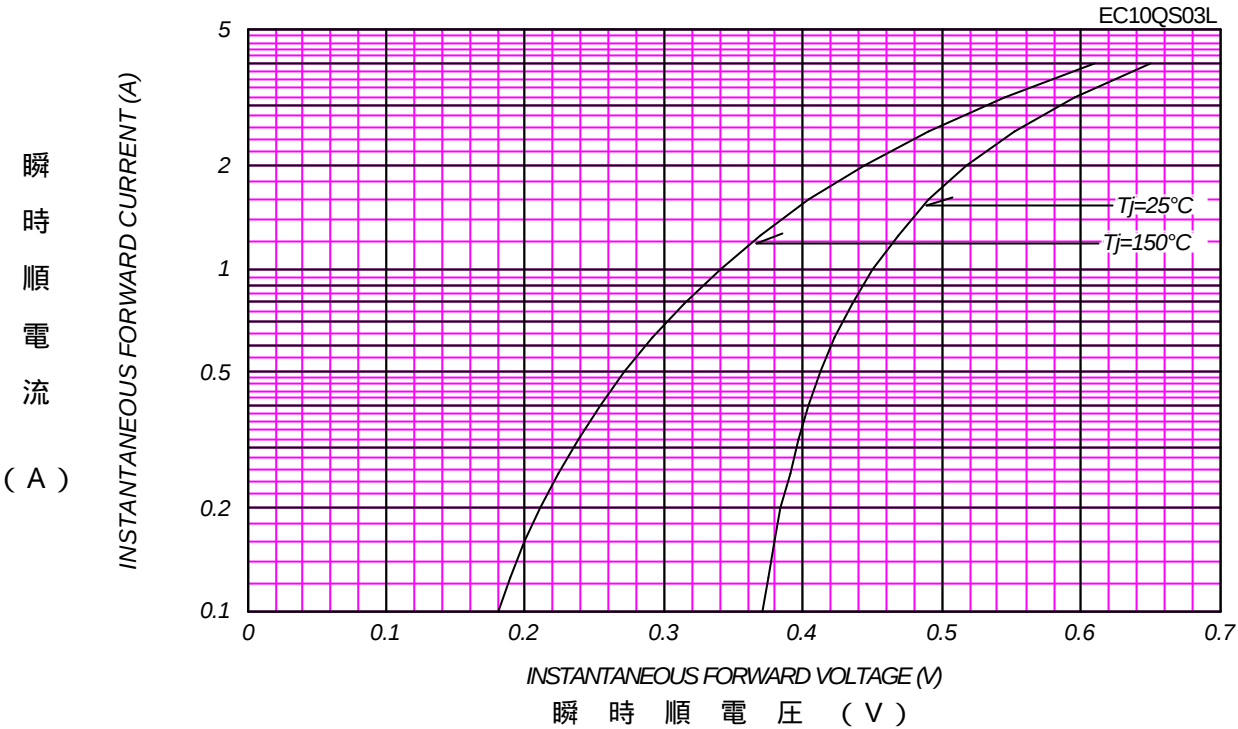
EC10QS_ 外形図 (単位: mm)



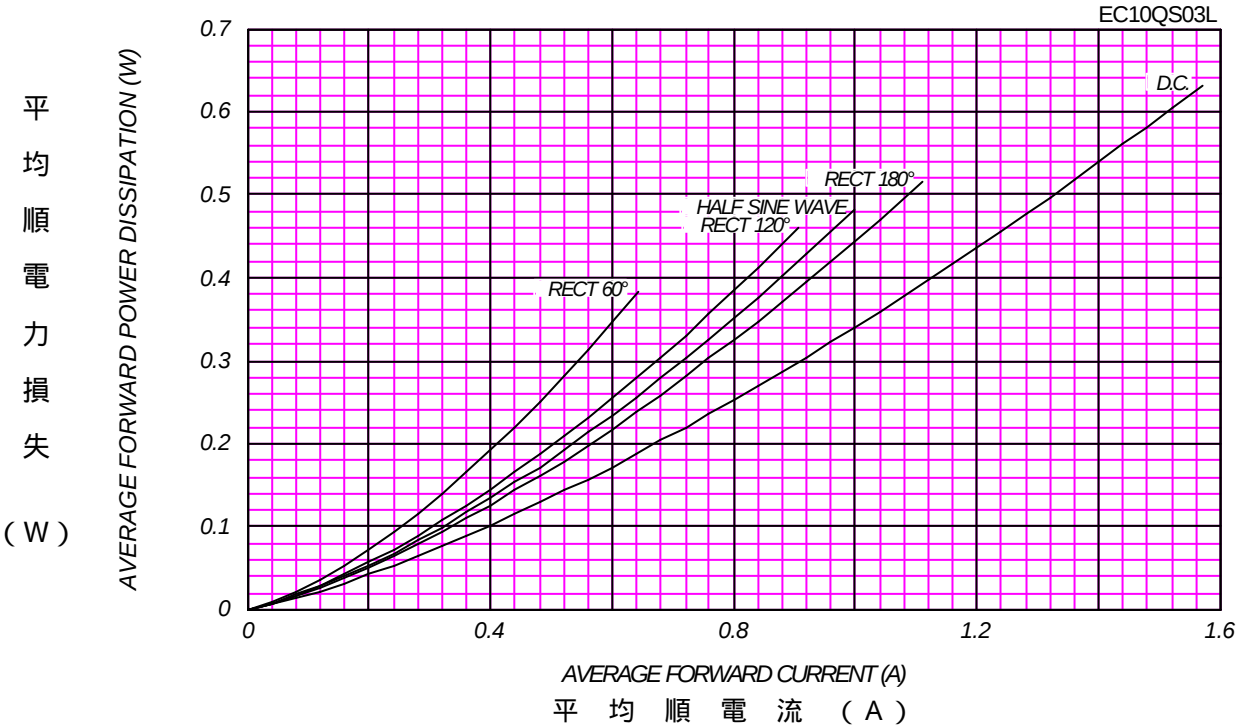
SOLDERING PAD



順電壓特性
FORWARD CURRENT VS. VOLTAGE

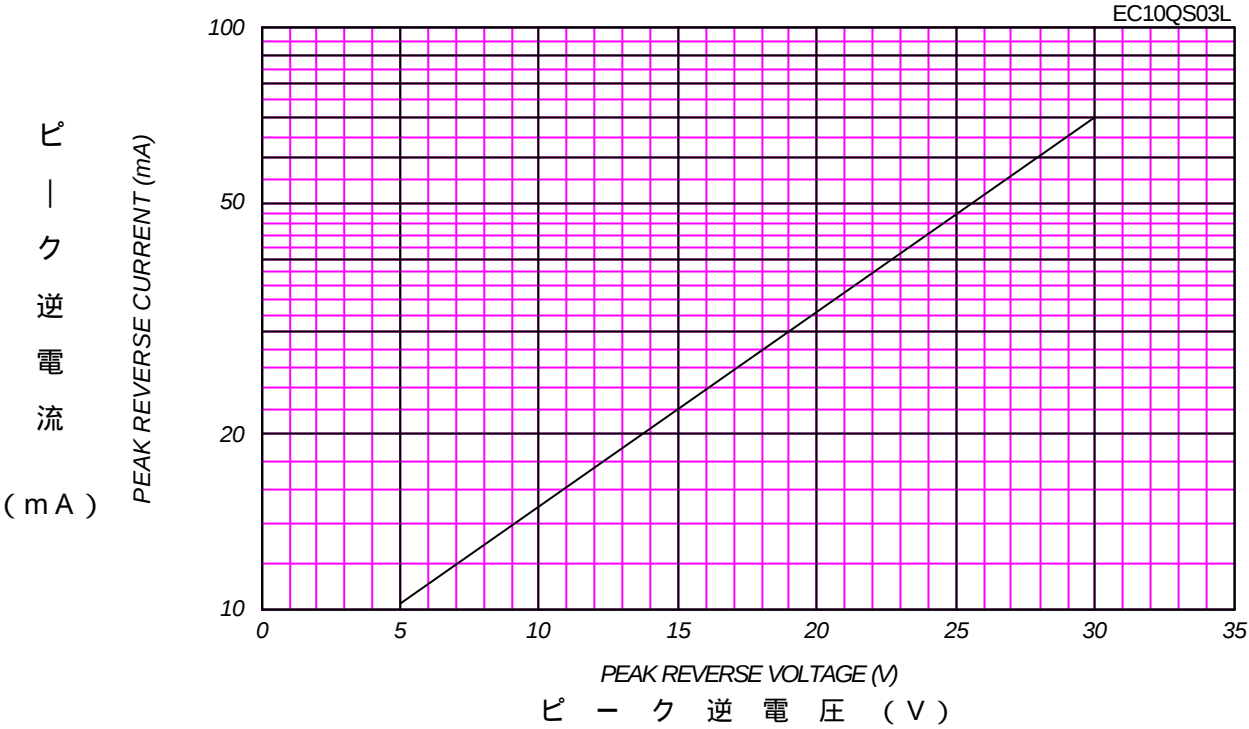


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

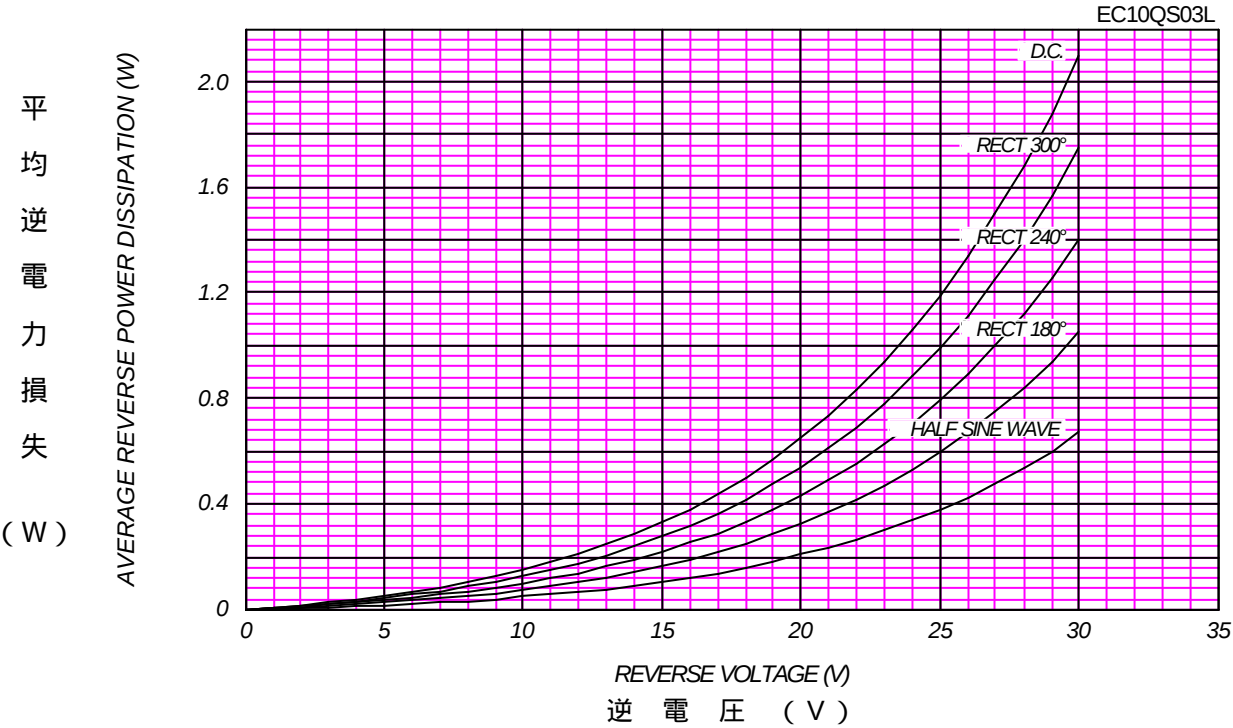


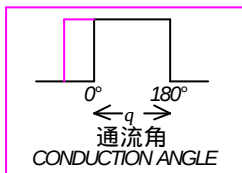
ピーク逆電流 - ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C



平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION



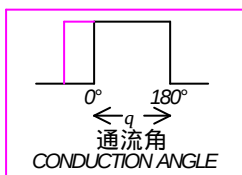
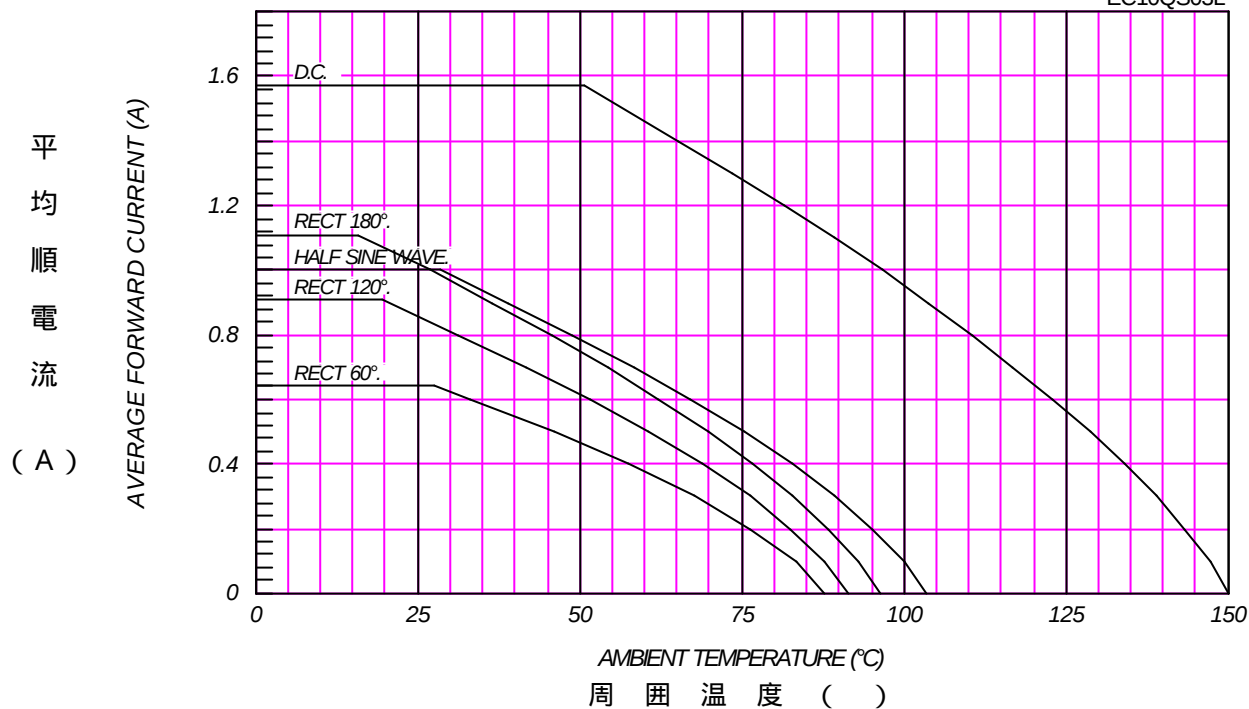


平均順電流 - 周圍溫度定格

AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate mounted(Land=2×2mm),V_{RM}=30V

EC10QS03L

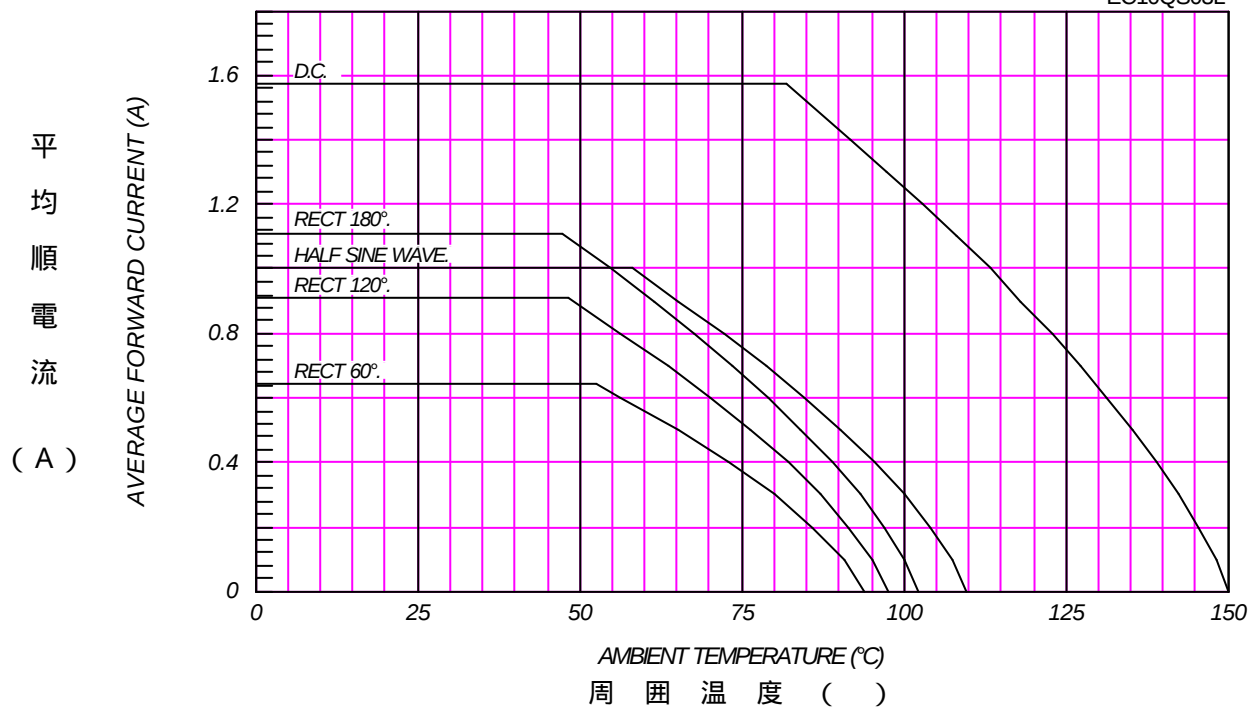


平均順電流 - 周圍溫度定格

AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate mounted(Land=2×2mm),V_{RM}=30V

EC10QS03L



サージ順電流定格 SURGE CURRENT RATINGS

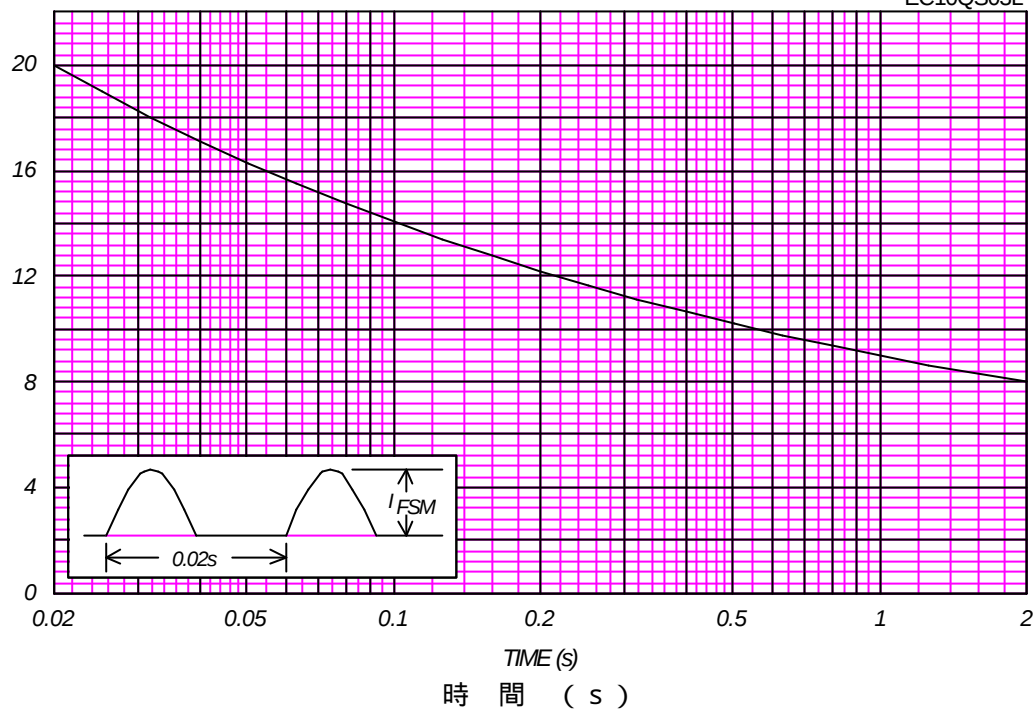
f=50Hz, Half Sine Wave, Non-Repetitive, No Load

EC10QS03L

サ
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流

(A)

SURGE FORWARD CURRENT (A)



接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

EC10QS03L

接
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量

(pF)

JUNCTION CAPACITANCE (pF)

