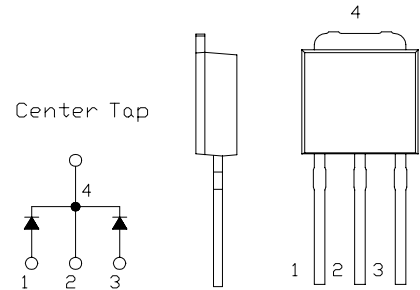


**10A 40V**
**SBD Type : ECQ10A04**

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	$I_0$	10.0	Tc=105 50 Hz, 正弦全波通電、抵抗負荷 Full Sine Wave Resistive Load	A
		2.0	Ta=23 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	Tjw	- 40 ~ + 150		
保存温度範囲 Storage Temperature Range	Tstg	- 40 ~ + 150		

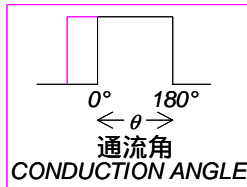
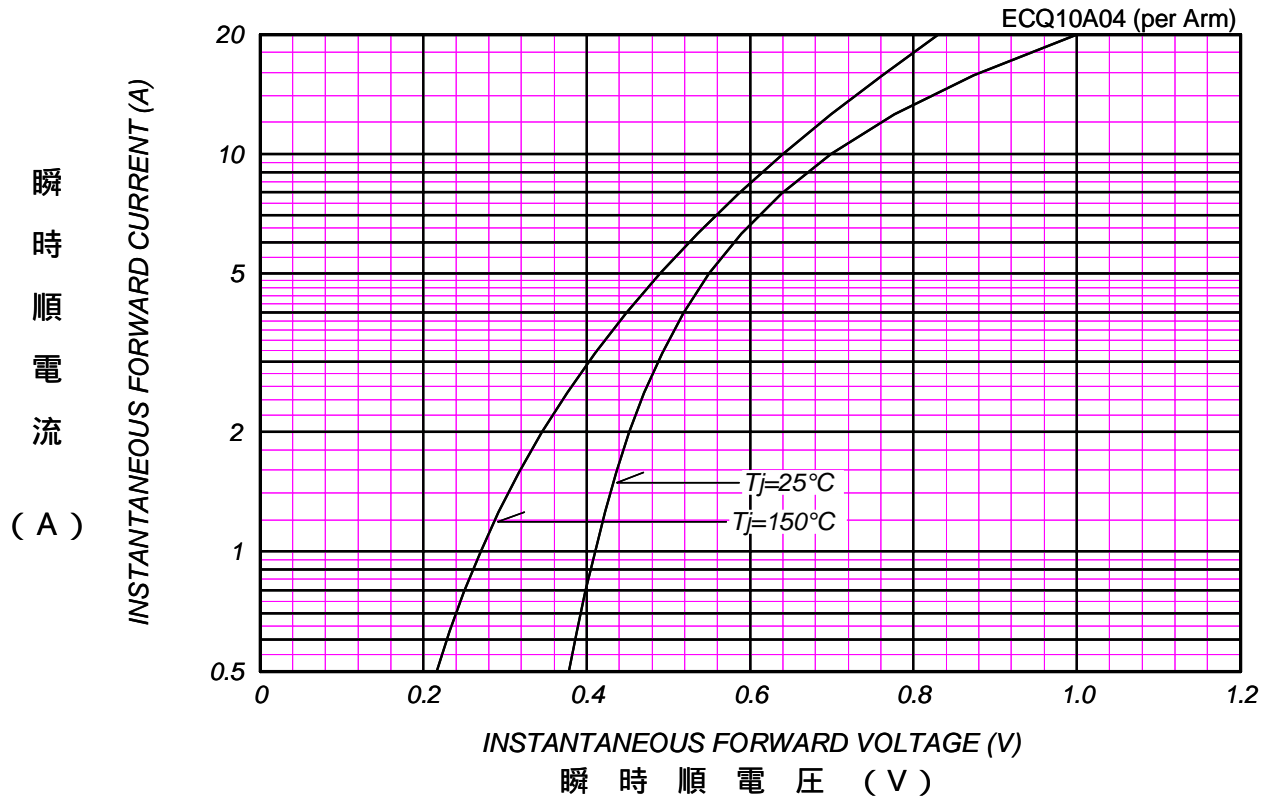
**電氣的・熱的特性 / Electrical・Thermal Characteristics**

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

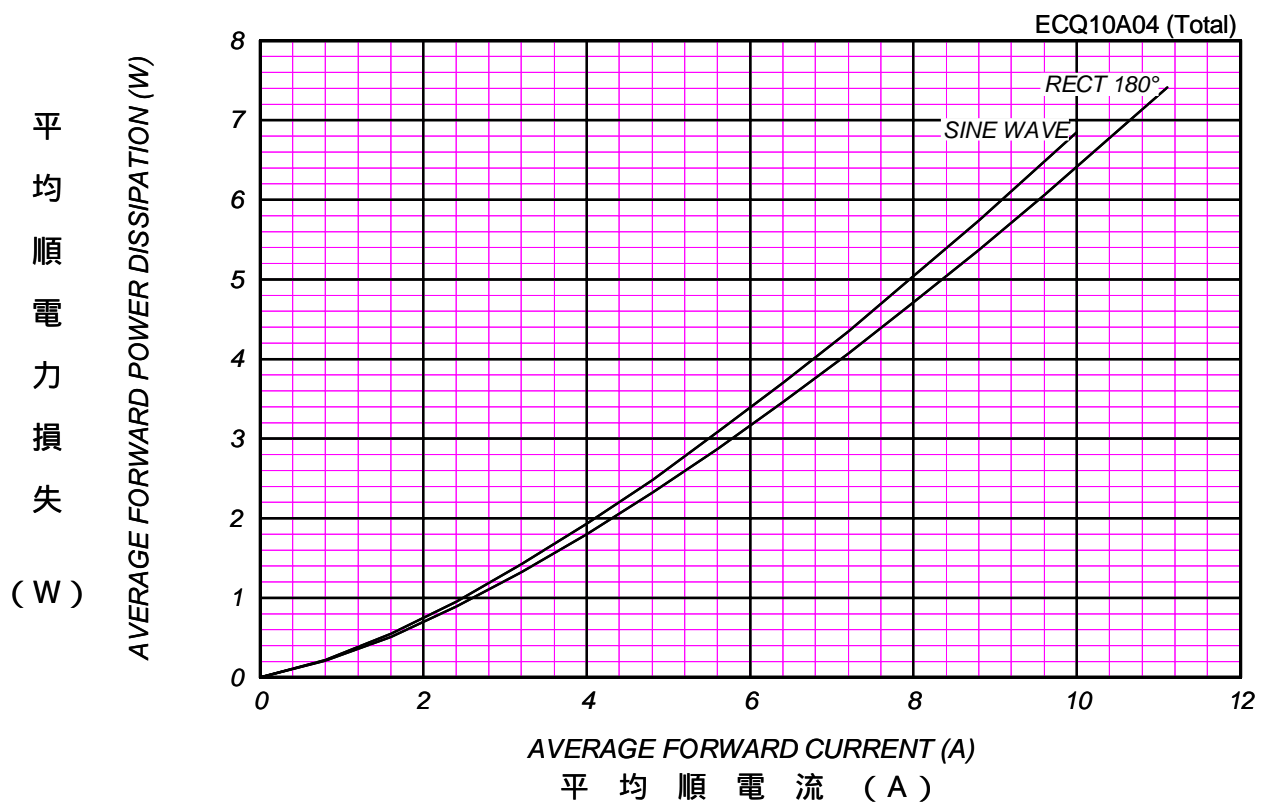
\* : Print land 20x20



順電压特性  
FORWARD CURRENT VS. VOLTAGE

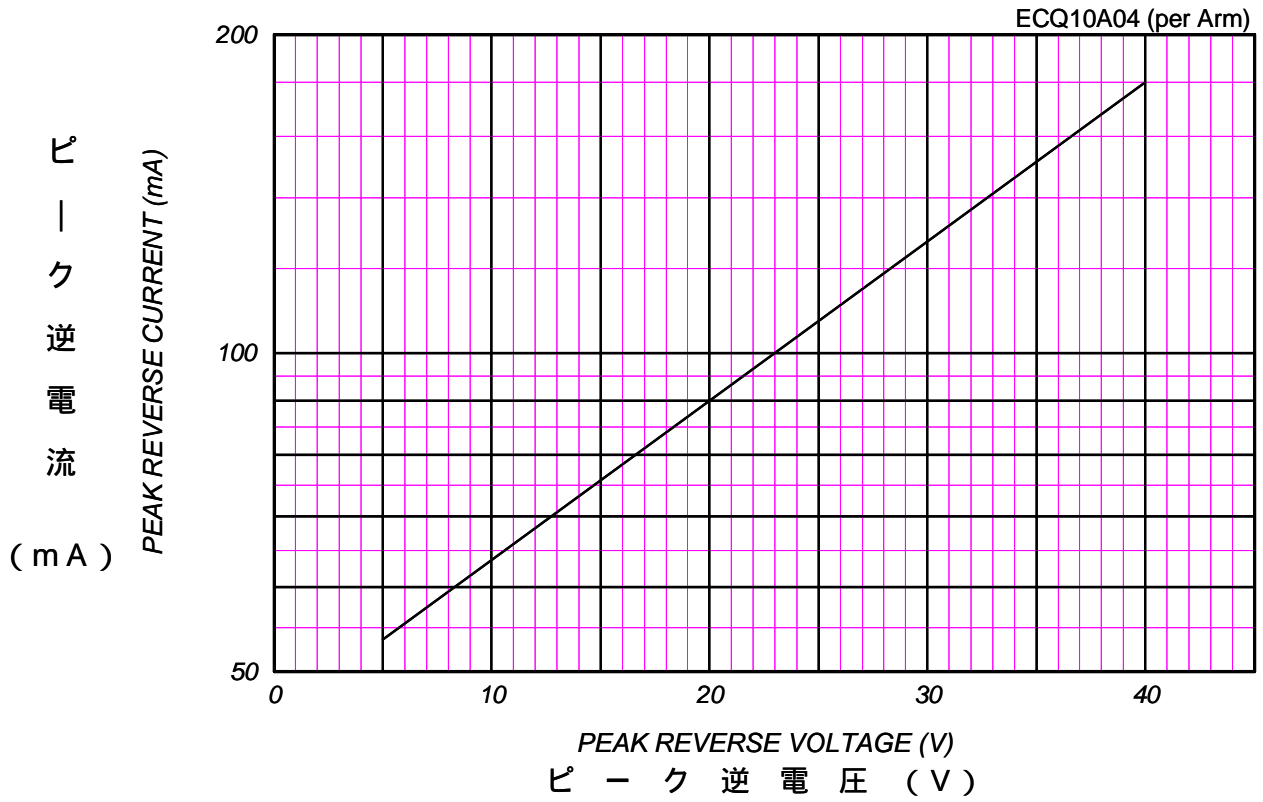


平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION

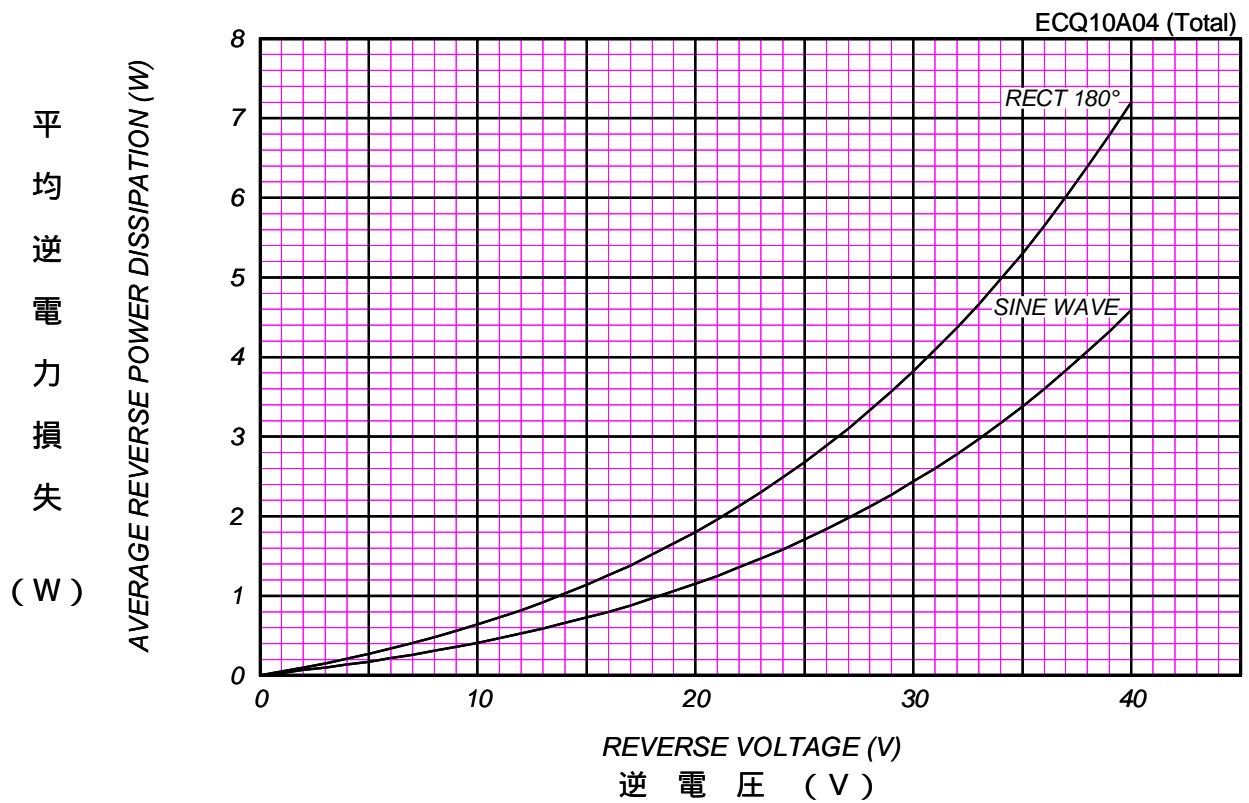


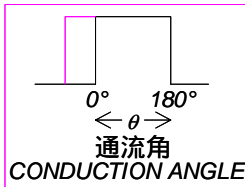
ピーク逆電流 - ピーク逆電圧特性  
 PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

T<sub>j</sub> = 150 °C



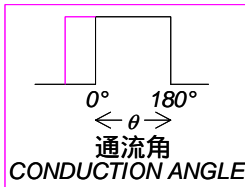
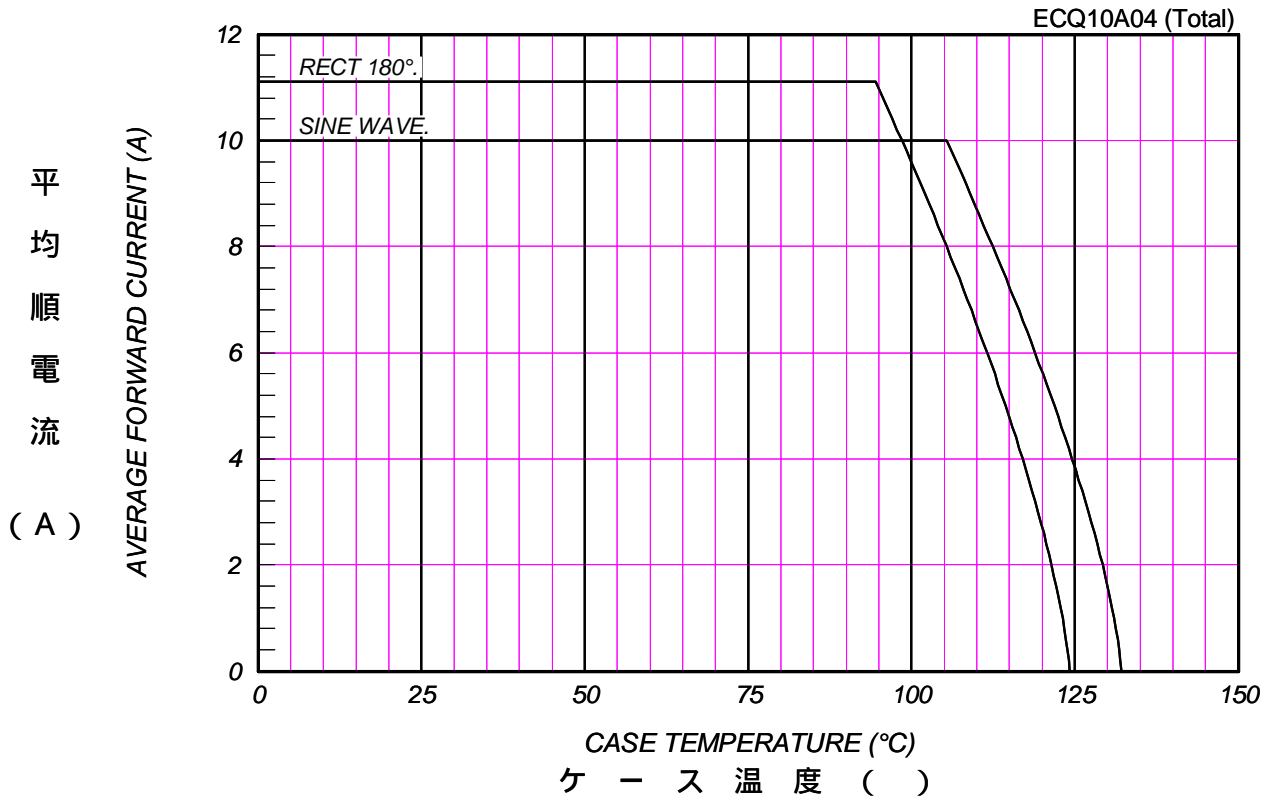
平均逆電力損失  
 AVERAGE REVERSE POWER DISSIPATION





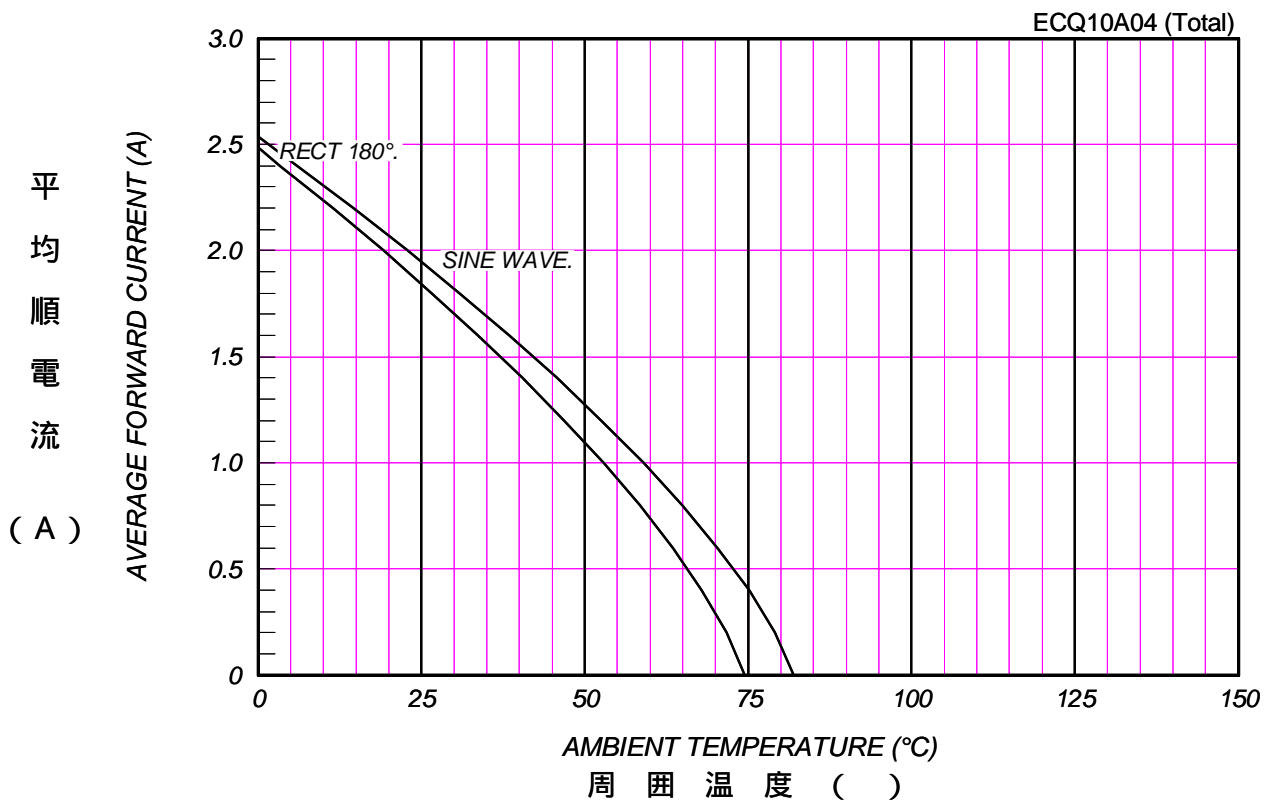
平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$



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

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

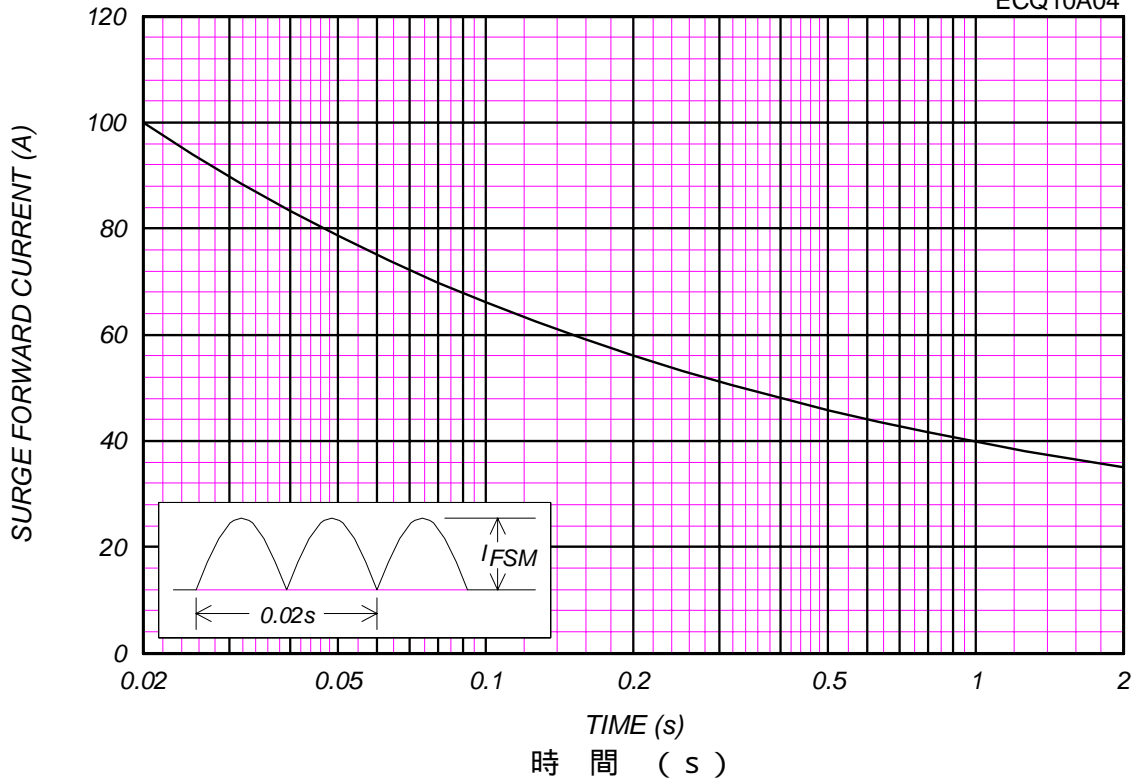


# サージ順電流定格 SURGE CURRENT RATINGS

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

ECQ10A04

サ  
ー  
ジ  
順  
電  
流  
  
(A)



# 接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

T<sub>j</sub>=25°C,V<sub>m</sub>=20mV<sub>RMS</sub>,f=100kHz,Typical Value

ECQ10A04 (per Arm)

接  
合  
容  
量  
  
(pF)

