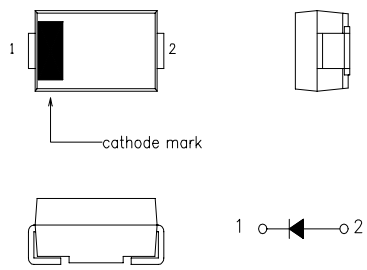
Nihon Inter Electronics Corporation

SBD Type : EC10LA03

FEATURES

* Miniature Size,Surface Mount Device
* Extremely Low Forward Voltage Drop
* Low Power Loss,High Efficiency
* High Surge Capability
* 30 Volts through 100Volts Types Available
* Packaged in 12mm Tape and Reel
* Not Rolling During Assembly

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:0.06g

Rating	Symbol	EC10LA03			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30			V
Direct Forward Current	I_{dc}	1.0	Ta=71 ℃ *1	Direct Current	A
		1.0	Ta=88 ℃ *2		
Surge Forward Current	I_{FSM}	25	50Hz Half Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T_{jw}	-40 to +125			℃
Storage Temperature Range	T_{stg}	-40 to +125			℃

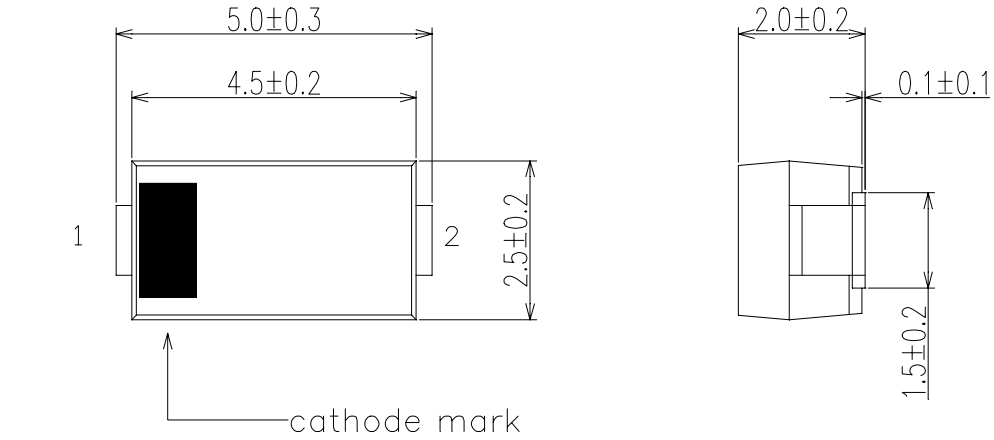
Electrical • Thermal Characteristics

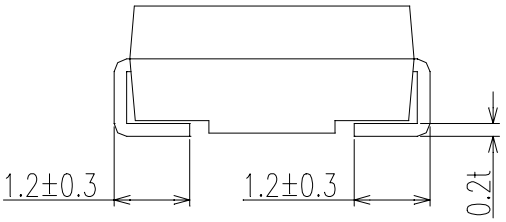
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}	-	-	2	mA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 1.0A	-	-	0.39	V
Thermal Resistance (Junction to Ambient)	$Rth_{(j-a)}$	Glass Epoxy Substrate Mounted*1	-	-	157	℃/W
		Alumina Substrate Mounted *2	-	-	108	

*1 Glass Epoxy Substrate Mounted

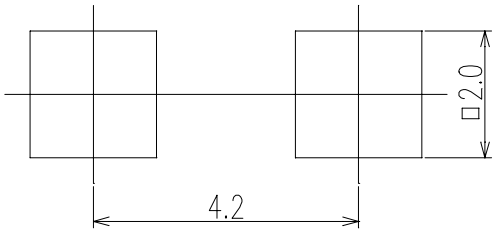
*2 Alumina Substrate Mounted
Soldering Lands=2x2mm,Both Sides

EC10LA_ OUTLINE DRAWING (Dimensions in mm)

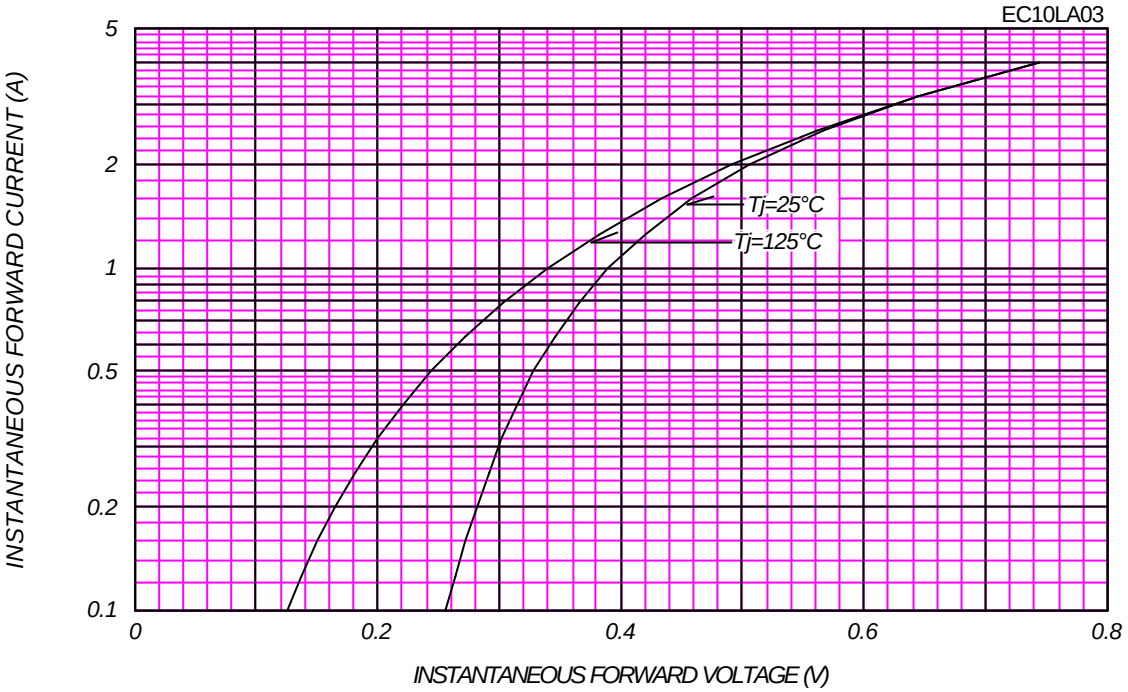




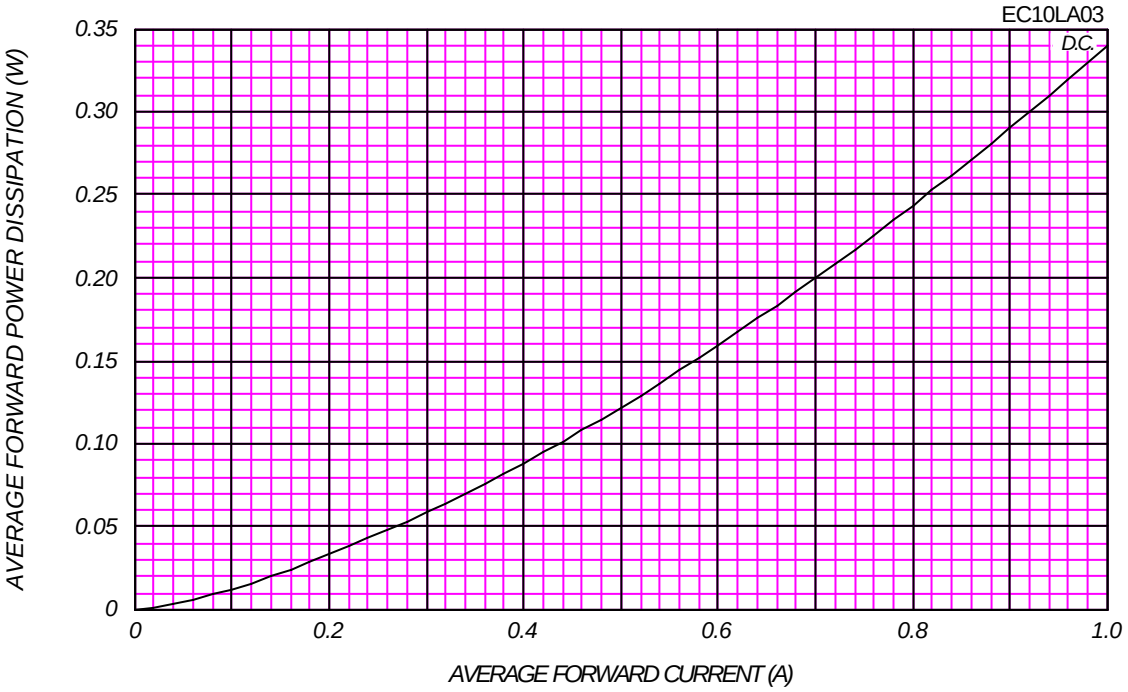
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE

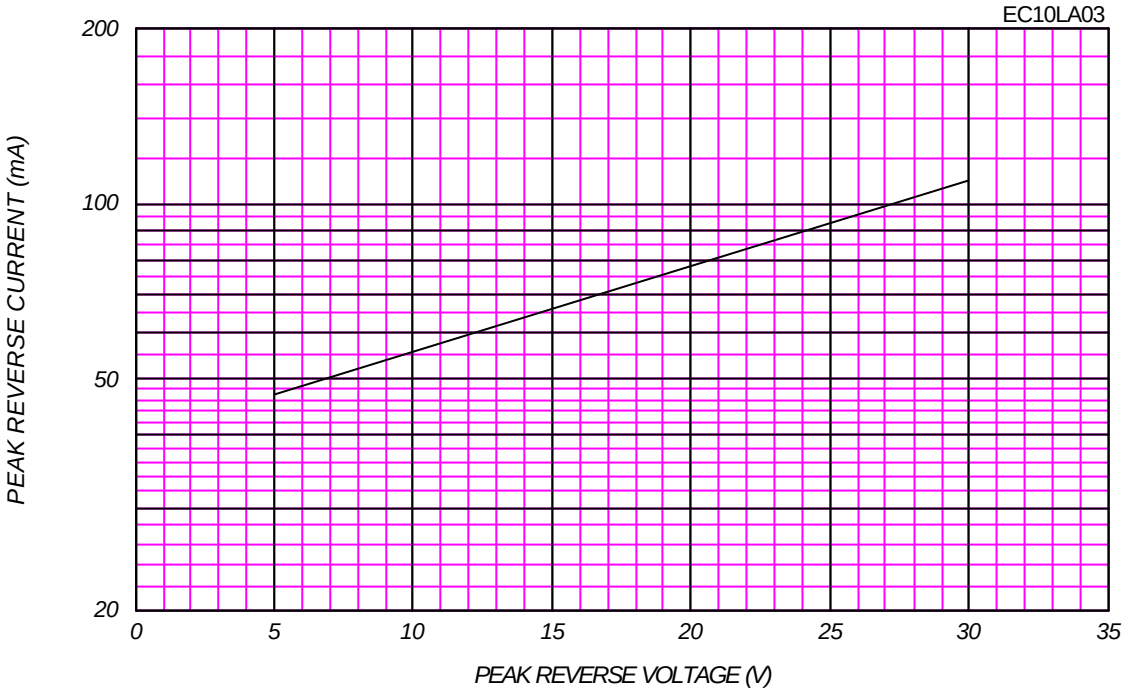


AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

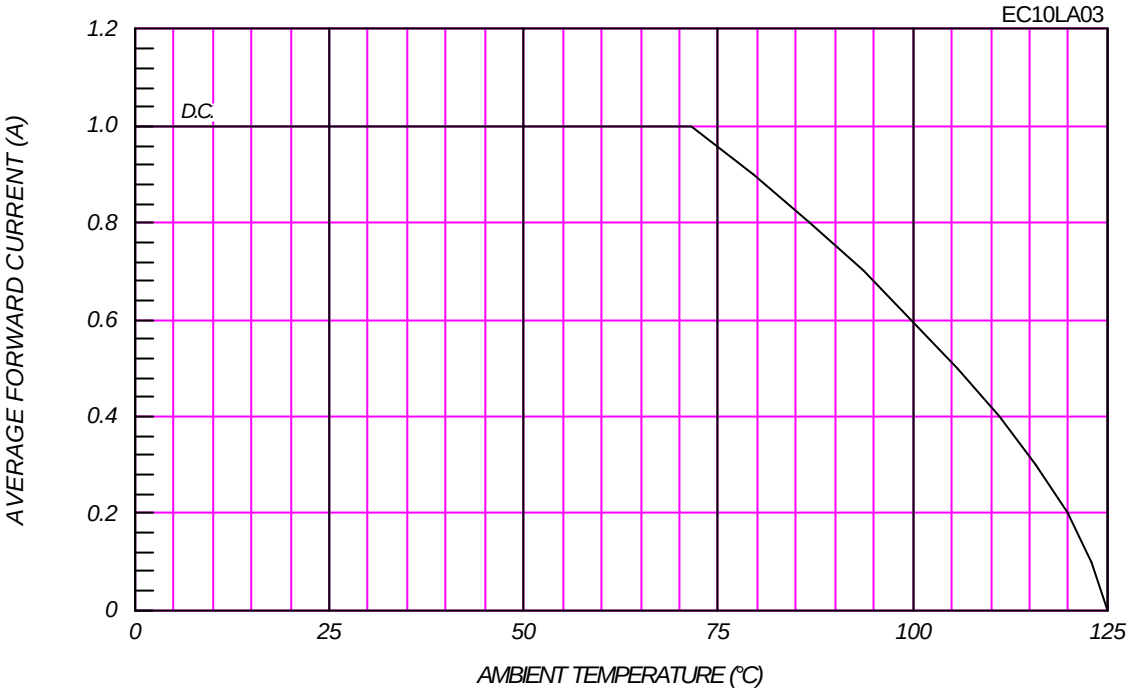
Tj= 125 °C



AVERAGE REVERSE POWER DISSIPATION

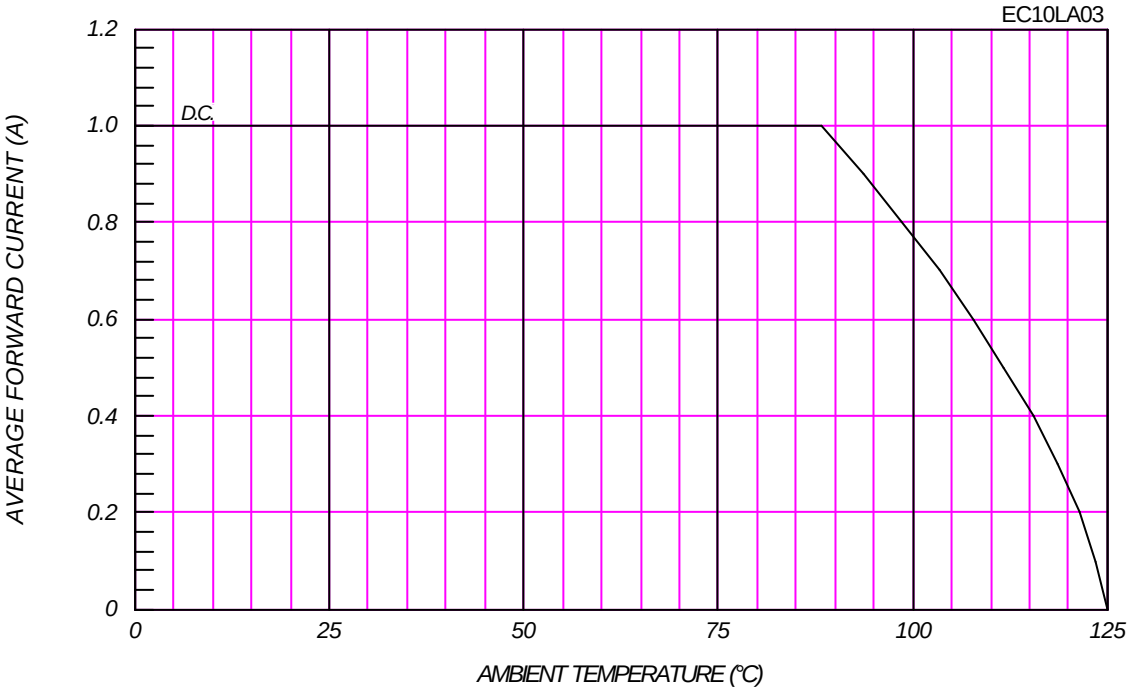
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate mounted(Land=2×2mm)



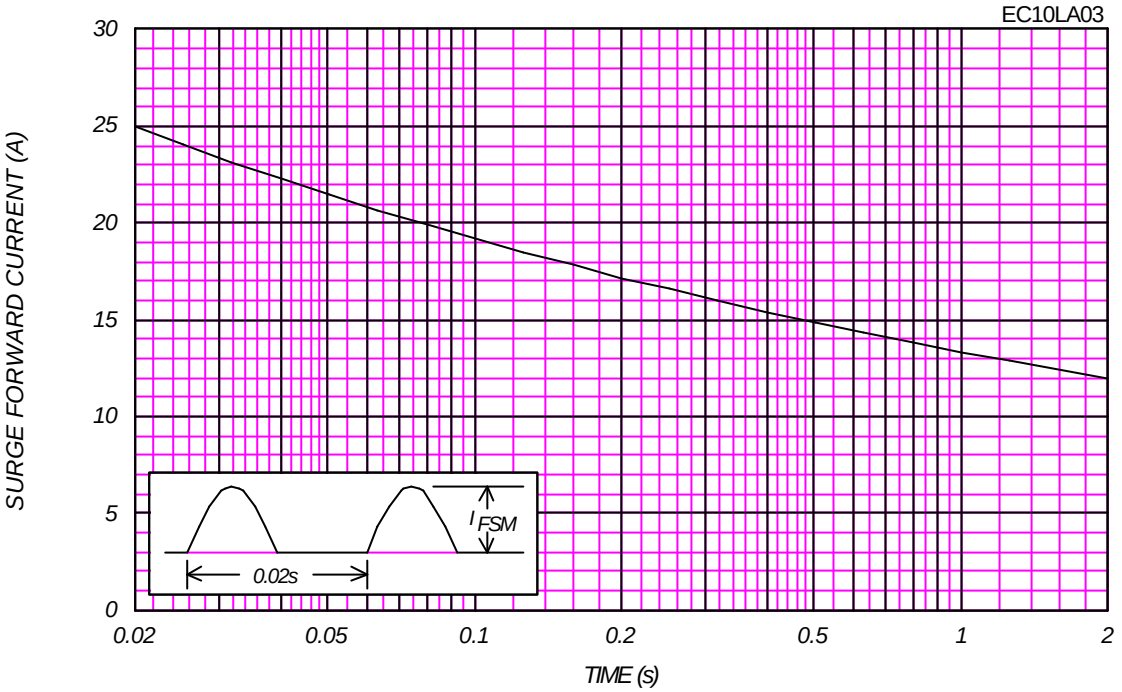
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate mounted(Land=2×2mm)



SURGE CURRENT RATINGS

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



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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