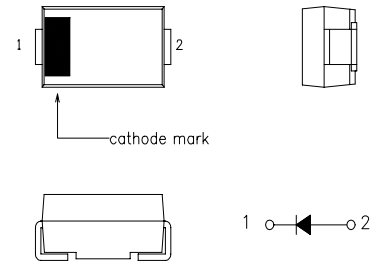


SBD Type : EC10LA03

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	$T_a=71\text{ }^\circ\text{C}$ *1	Direct Current	A
		1.0	$T_a=88\text{ }^\circ\text{C}$ *2		
Surge Forward Current	I_{FSM}	25	50Hz Half Sine Wave, 1cycle Non-repetitive		A
Operating Junction Temperature Range	T_{jw}	-40 to +125		$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-40 to +125		$^\circ\text{C}$	

Electrical • Thermal Characteristics

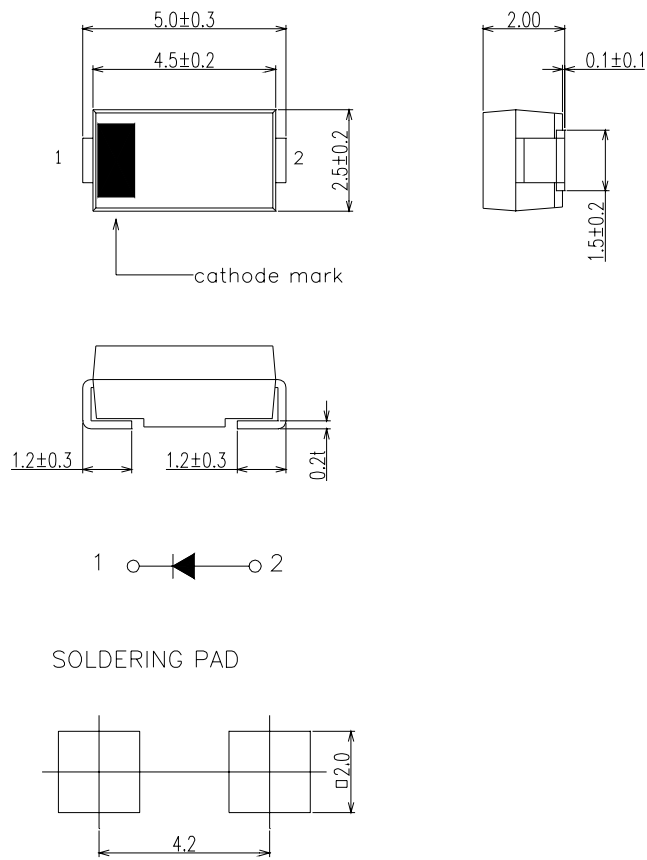
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25\text{ }^\circ\text{C}$, $V_{RM}=V_{RRM}$	-	-	2	mA
Peak Forward Voltage	V_{FM}	$T_j=25\text{ }^\circ\text{C}$, $I_{FM}=1.0\text{A}$	-	-	0.39	V
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	Glass Epoxy Substrate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

*1 Glass Epoxy Substrate Mounted

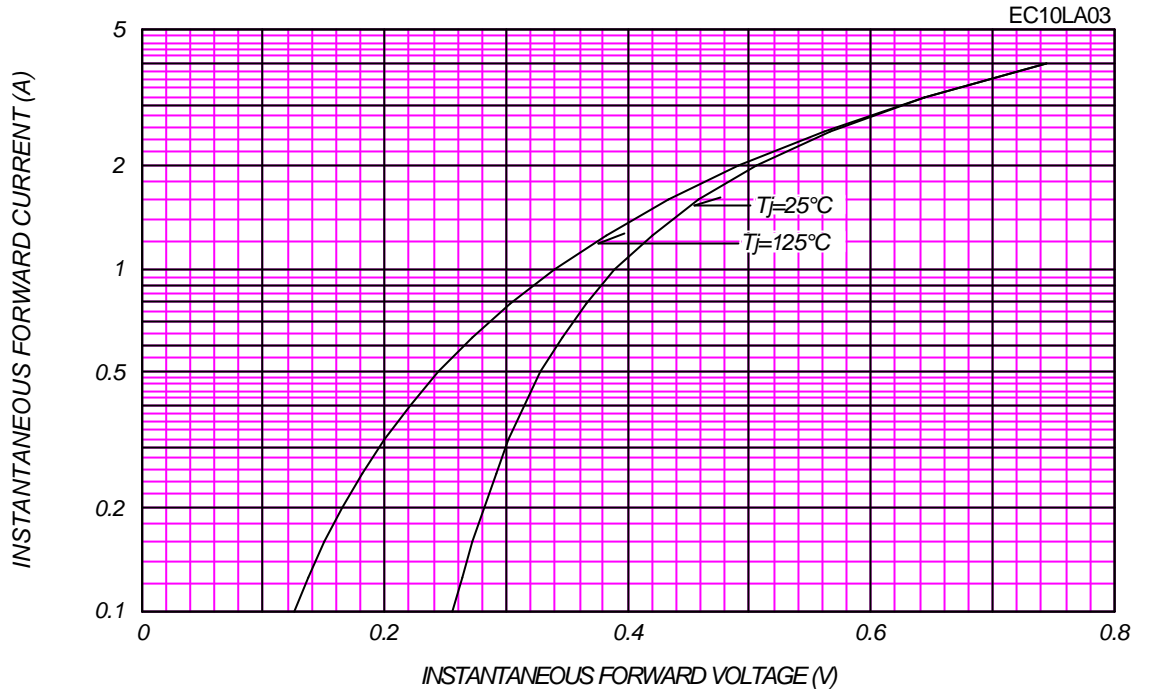
*2 Alumina Substrate Mounted

Soldering Lands=2x2mm, Both Sides

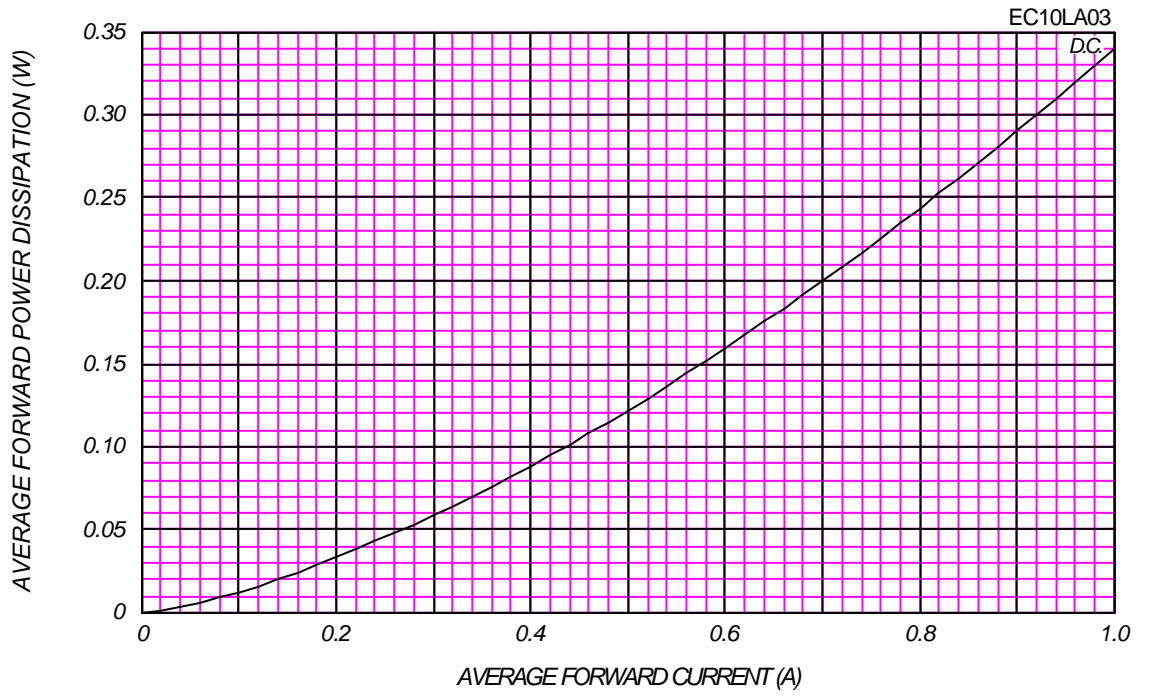
EC10LA03 OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



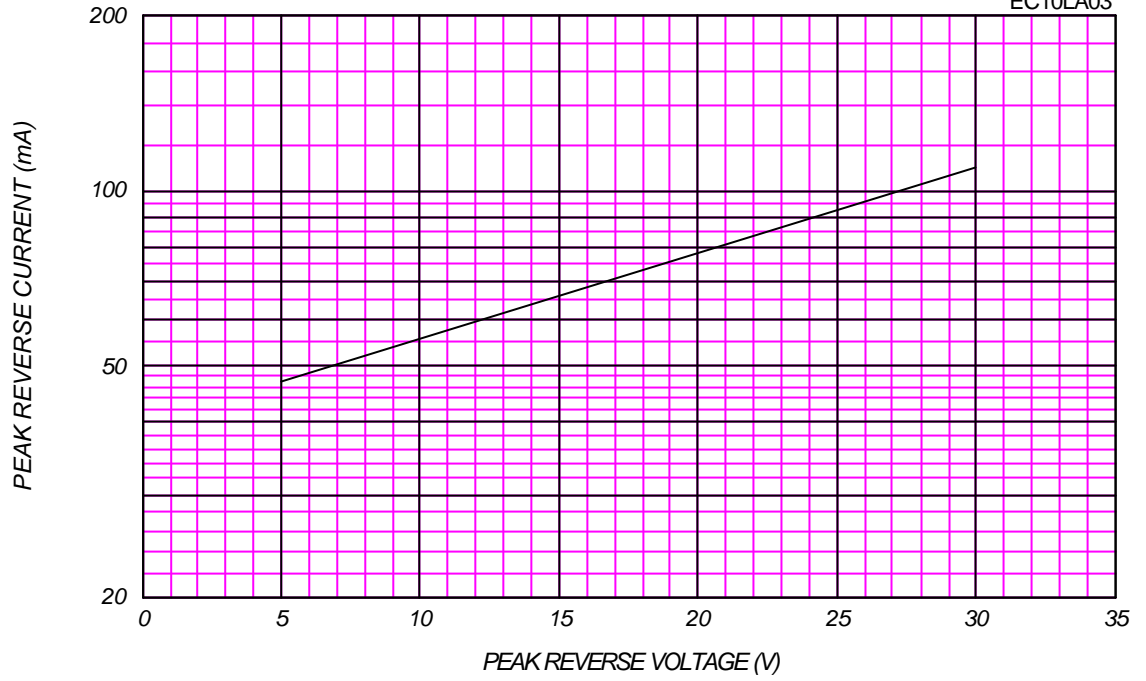
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

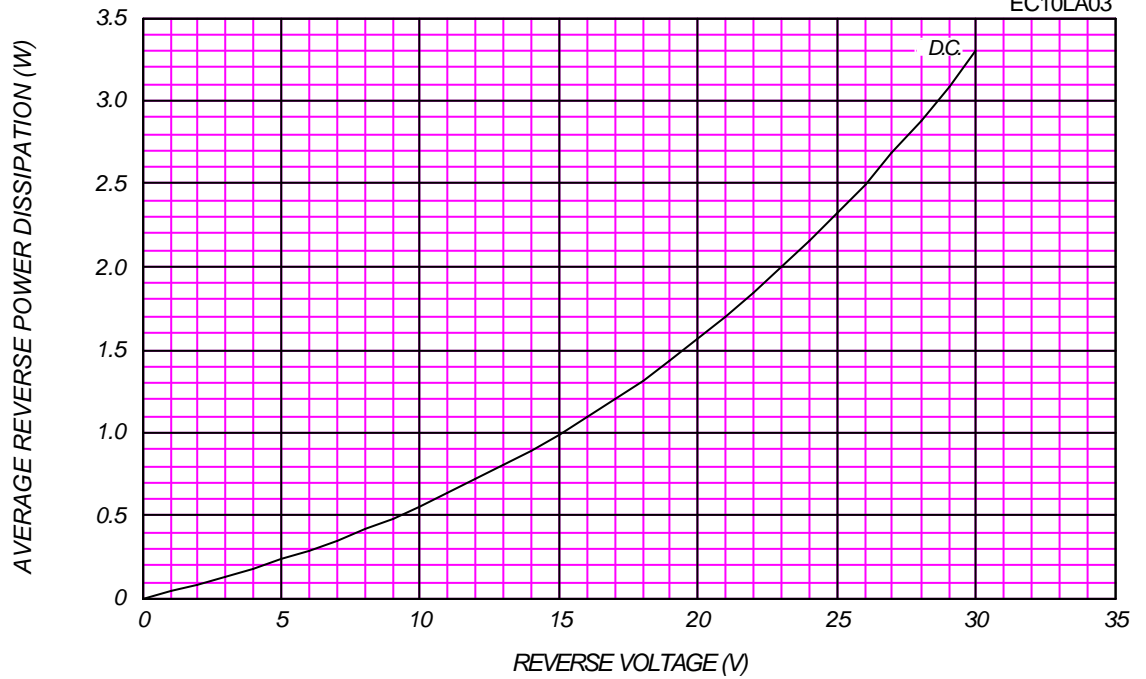
$T_j = 125\text{ }^\circ\text{C}$

EC10LA03



AVERAGE REVERSE POWER DISSIPATION

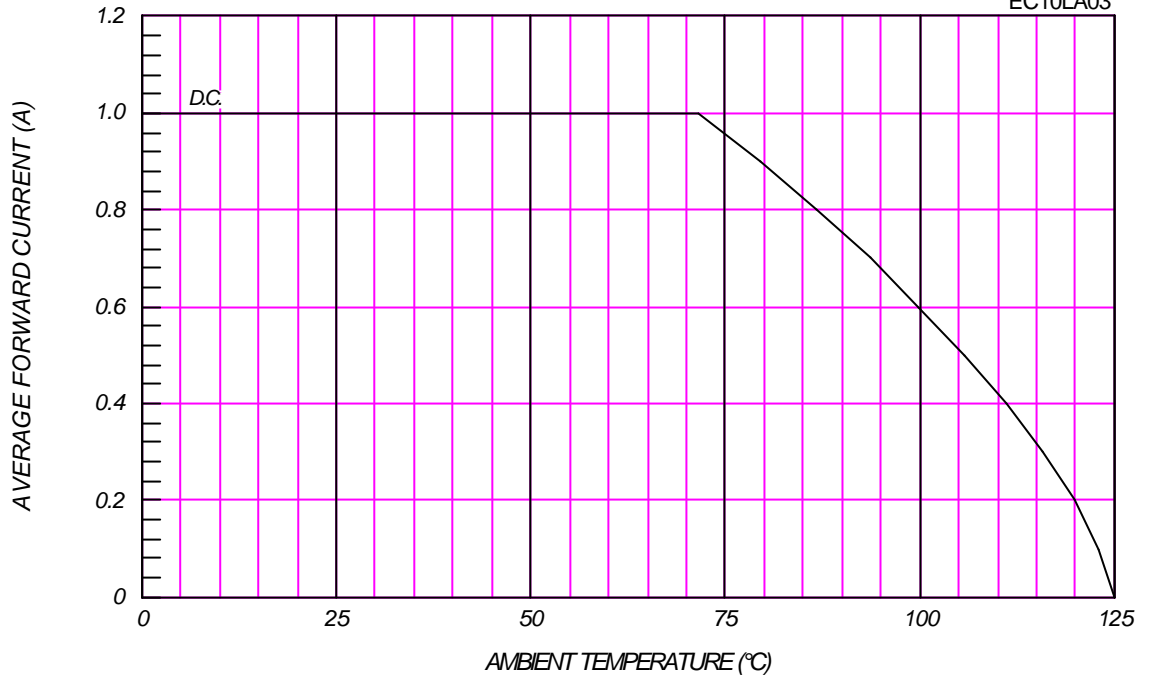
EC10LA03



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate mounted(Land=2x2mm)

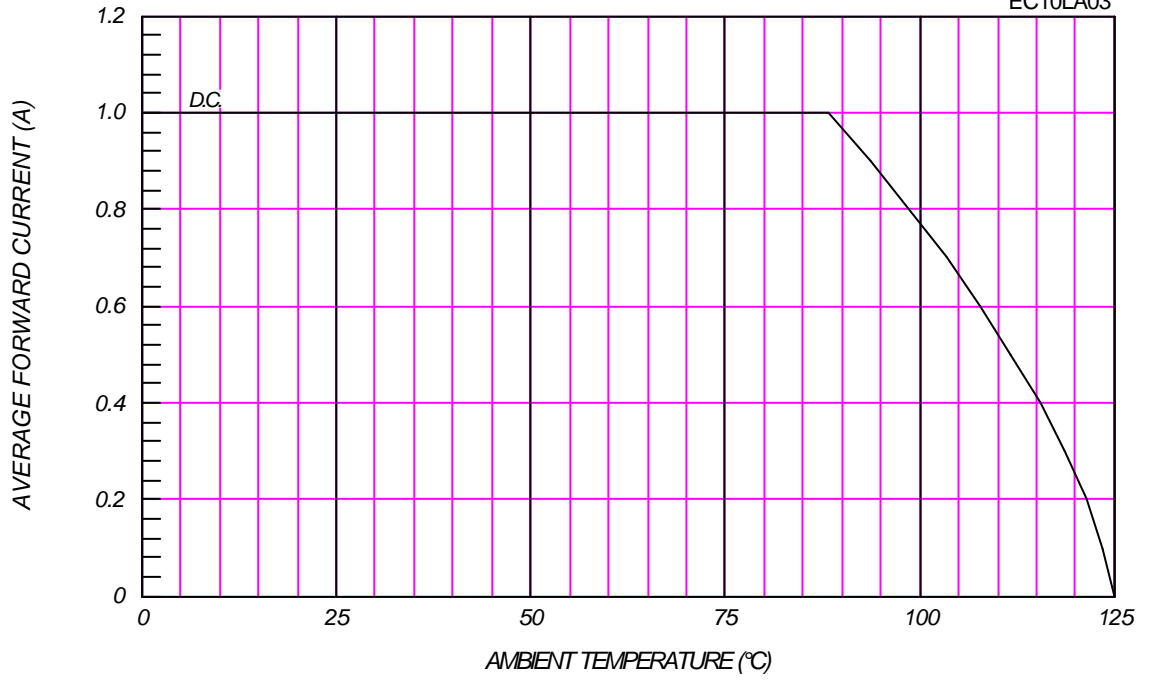
EC10LA03



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate mounted(Land=2x2mm)

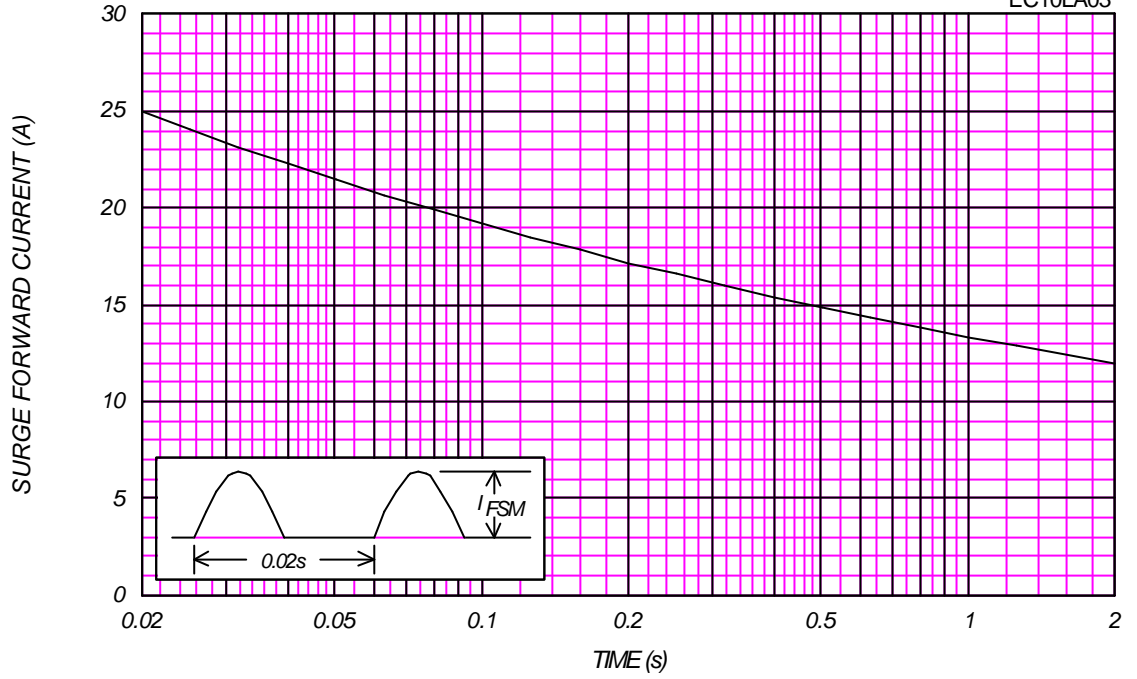
EC10LA03



SURGE CURRENT RATINGS

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

EC10LA03



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^\circ\text{C}$, $V_m=20\text{mV}_{\text{RMS}}$, $f=100\text{kHz}$, Typical Value

EC10LA03

