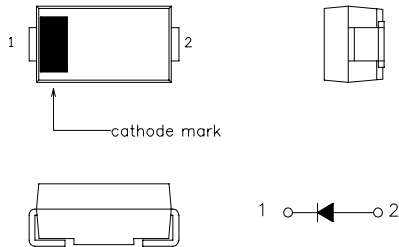


SBD Type : EC10QS03L

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

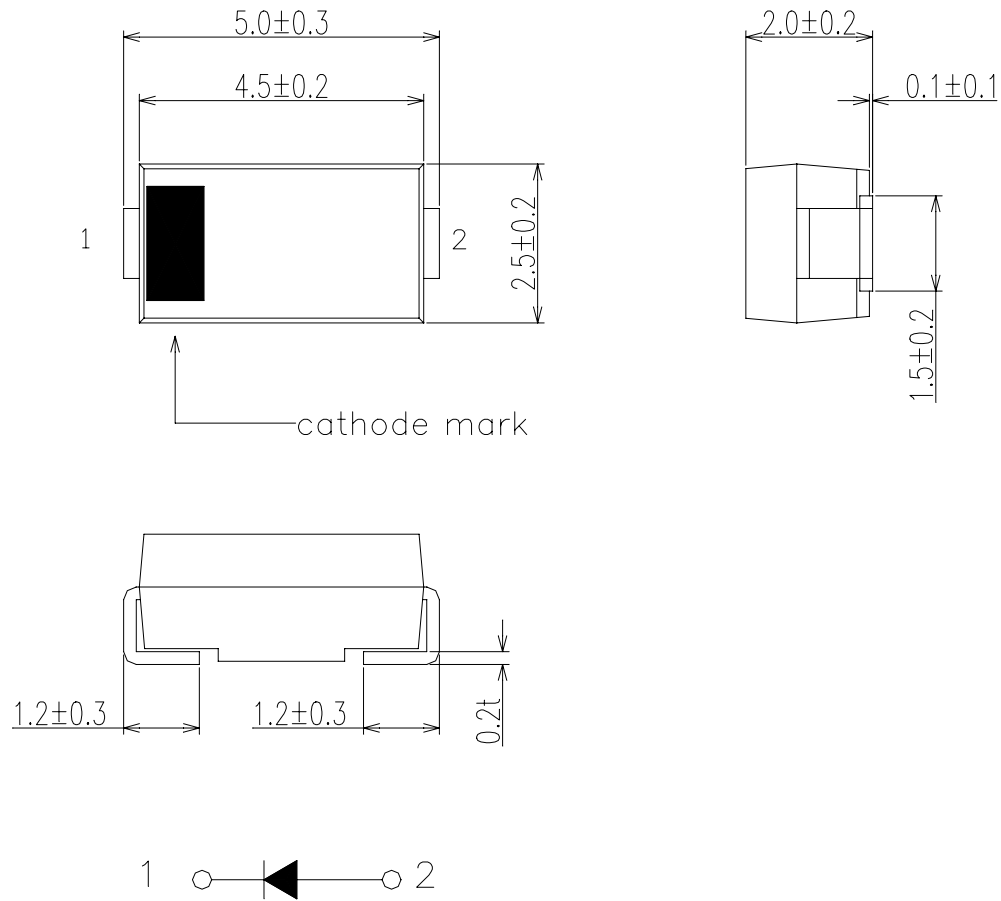
Rating	Symbol	EC10QS03L			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	30			V
Average Rectified Output Current	I _O	1.0	Ta=28 °C *1	50Hz Half Sine Wave Resistive Load	A
		1.0	Ta=58 °C *2		
RMS Forward Current	I _{F(RMS)}	1.57			A
Surge Forward Current	I _{FSM}	20	50Hz Half Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			°C
Storage Temperature Range	T _{stg}	-40 to +150			°C

Electrical • Thermal Characteristics

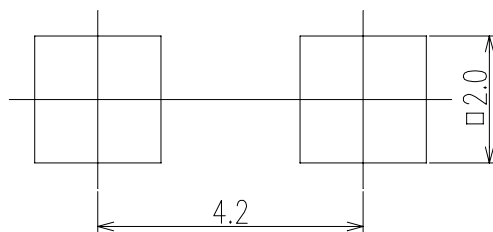
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}\text{C}$, $V_{RM}=V_{RRM}$	-	-	1.0	mA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}\text{C}$, $I_{FM}=1.0\text{A}$	-	-	0.45	V
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	*1	-	157	$^{\circ}\text{C}/\text{W}$
			*2	-	108	

- *1 Glass Epoxy Substrate Mounted
- *2 Alumina Substrate Mounted
- Soldering Lands=2x2mm, Both Sides

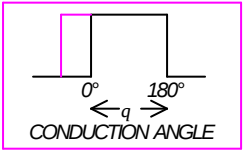
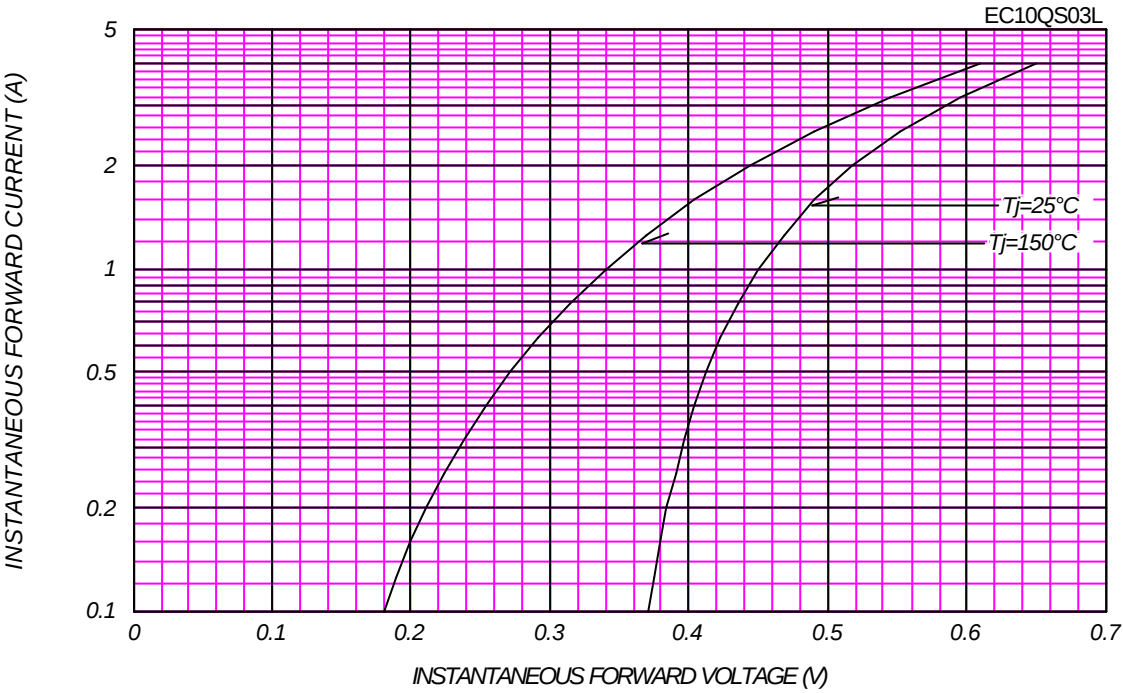
EC10QS_ OUTLINE DRAWING (Dimensions in mm)



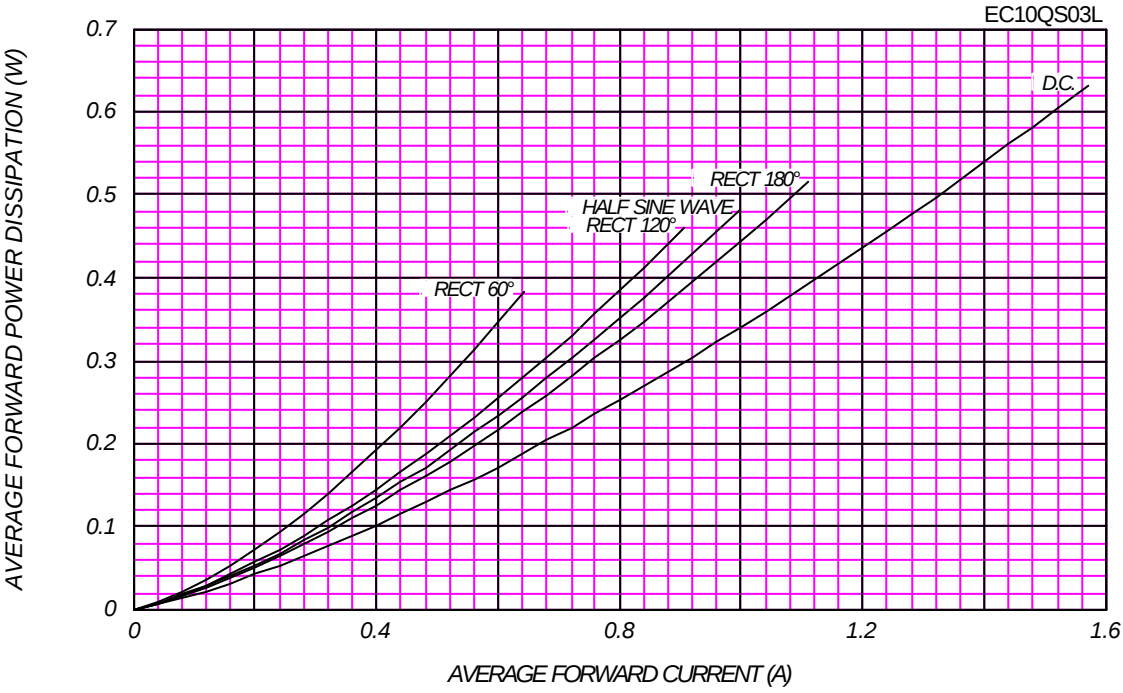
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



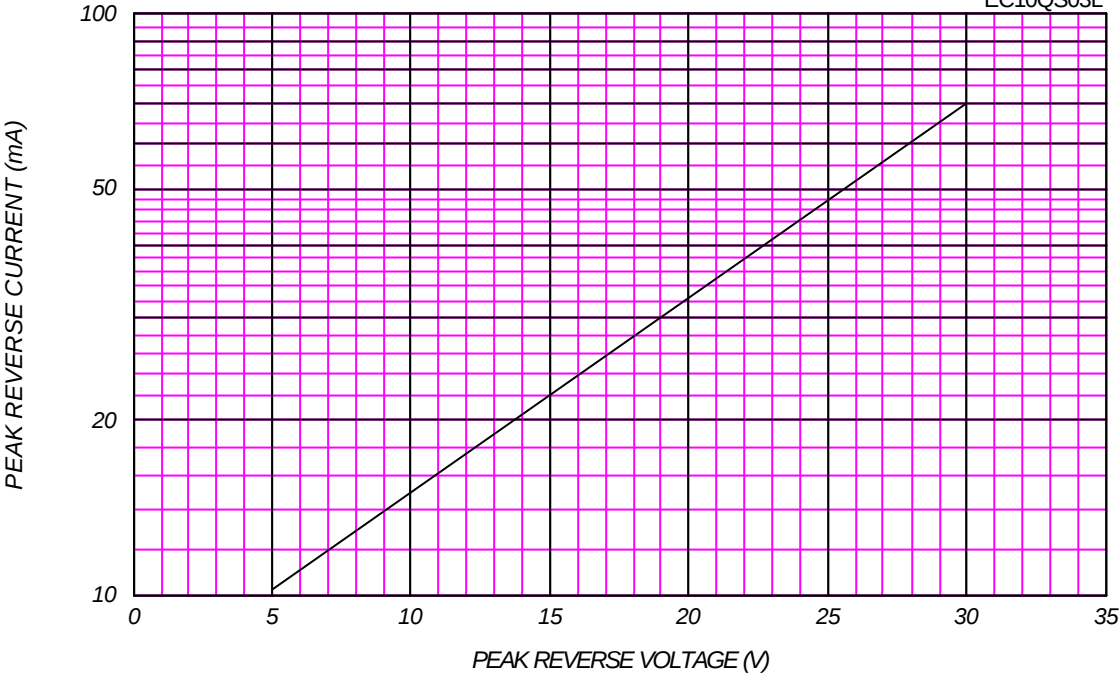
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

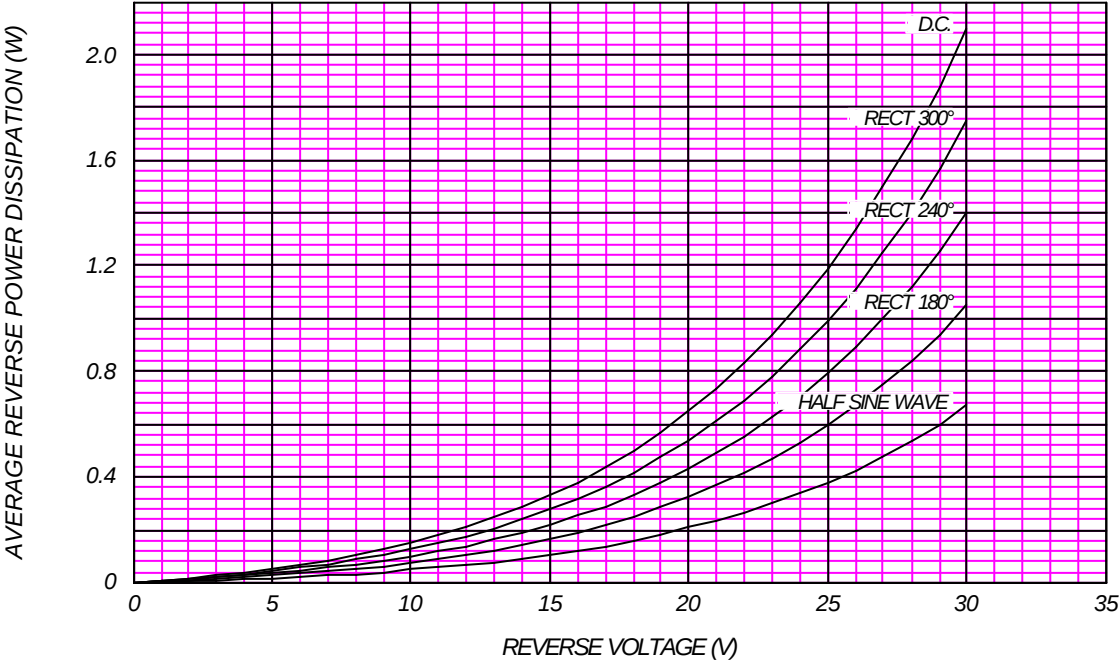
Tj= 150 °C

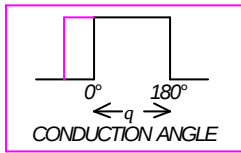
EC10QS03L



AVERAGE REVERSE POWER DISSIPATION

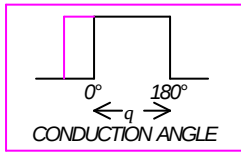
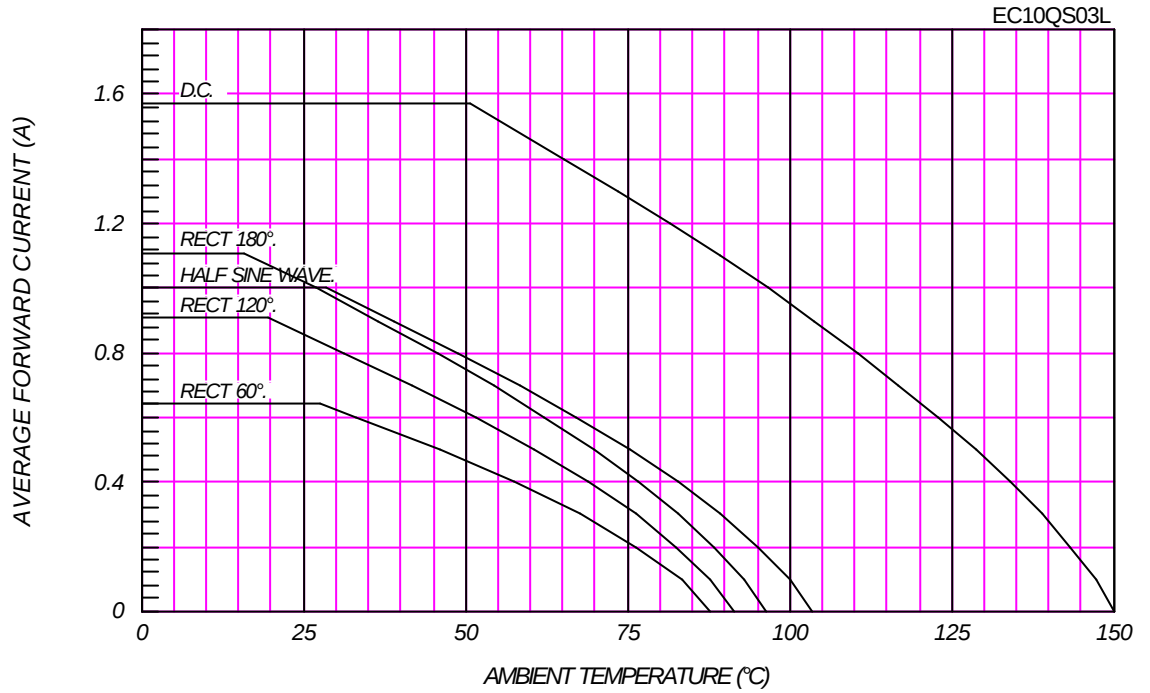
EC10QS03L





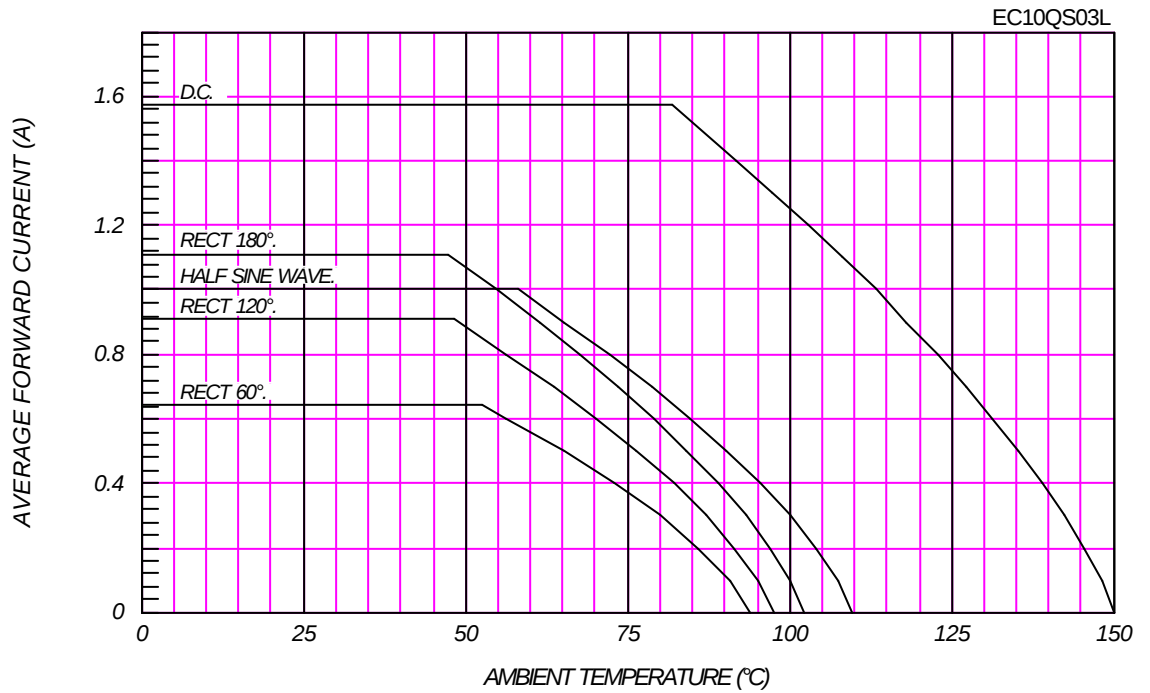
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

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



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

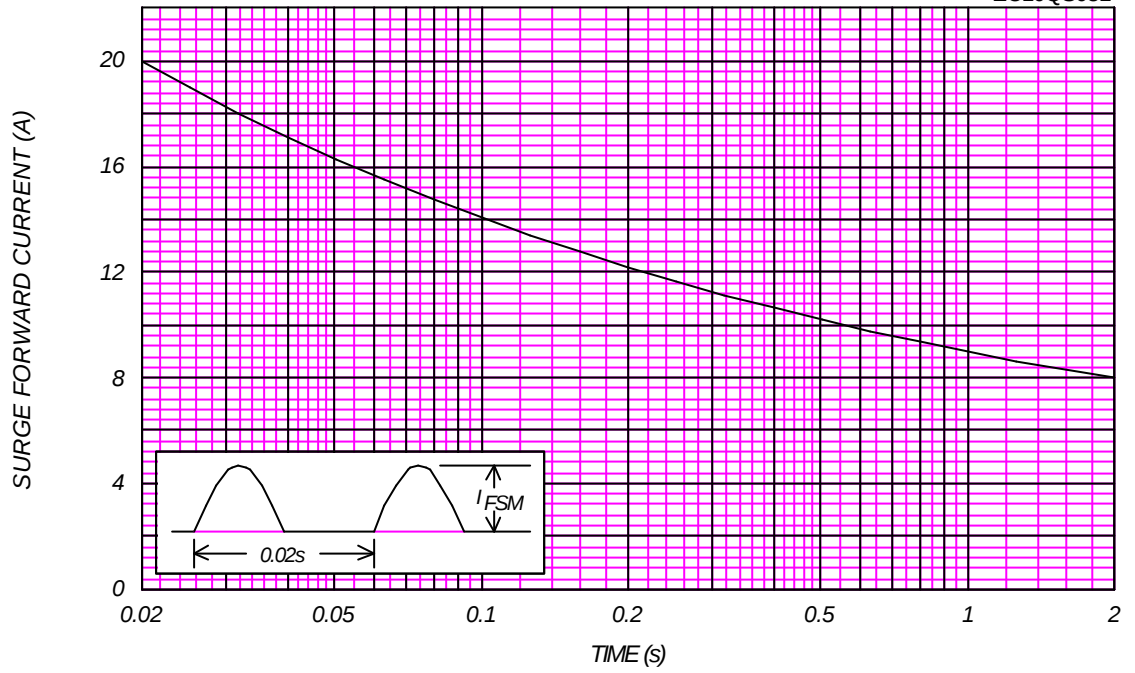
Alumina Substrate mounted(Land=2×2mm), $V_{RM}=30V$



SURGE CURRENT RATINGS

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

EC10QS03L



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

T_j=25° C, V_m=20mV_{RMS}, f=100kHz, Typical Value

EC10QS03L

