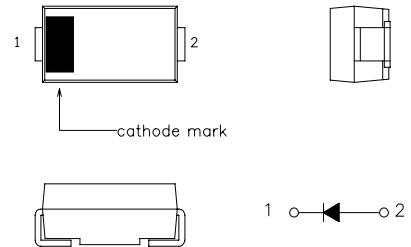


SBD Type : EC10QS06

FEATURES

- * Miniature Size, Surface Mount Device
- * 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	EC10QS06			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	60			V
Non-repetitive Peak Reverse Voltage	V _{RSM}	65			
Average Rectified Output Current	I _O	0.72	Ta=27 °C *1	50Hz Half Sine	A
		1.0	Ta=30 °C *2	Wave Resistive Load	
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

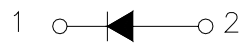
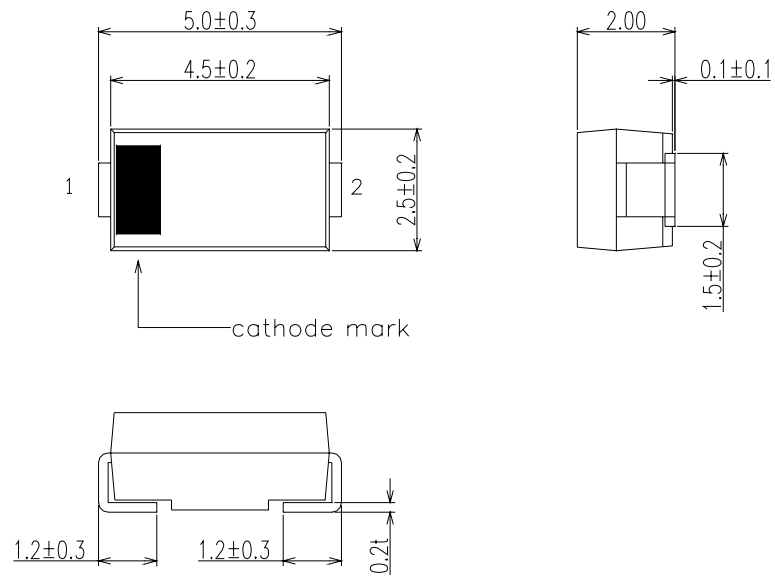
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j = 25^\circ\text{C}$, $V_{RM} = V_{RRM}$	-	-	1.0	mA
Peak Forward Voltage	V_{FM}	$T_j = 25^\circ\text{C}$, $I_{FM} = 1.0\text{A}$	-	-	0.58	V
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	*1	-	-	157
			*2	-	-	108

*1 Glass Epoxy Substrate Mounted

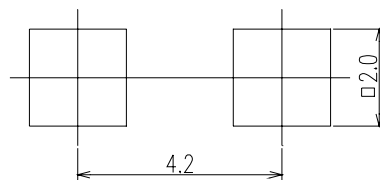
*2 Alumina Substrate Mounted

Soldering Lands = 2x2mm, Both Sides

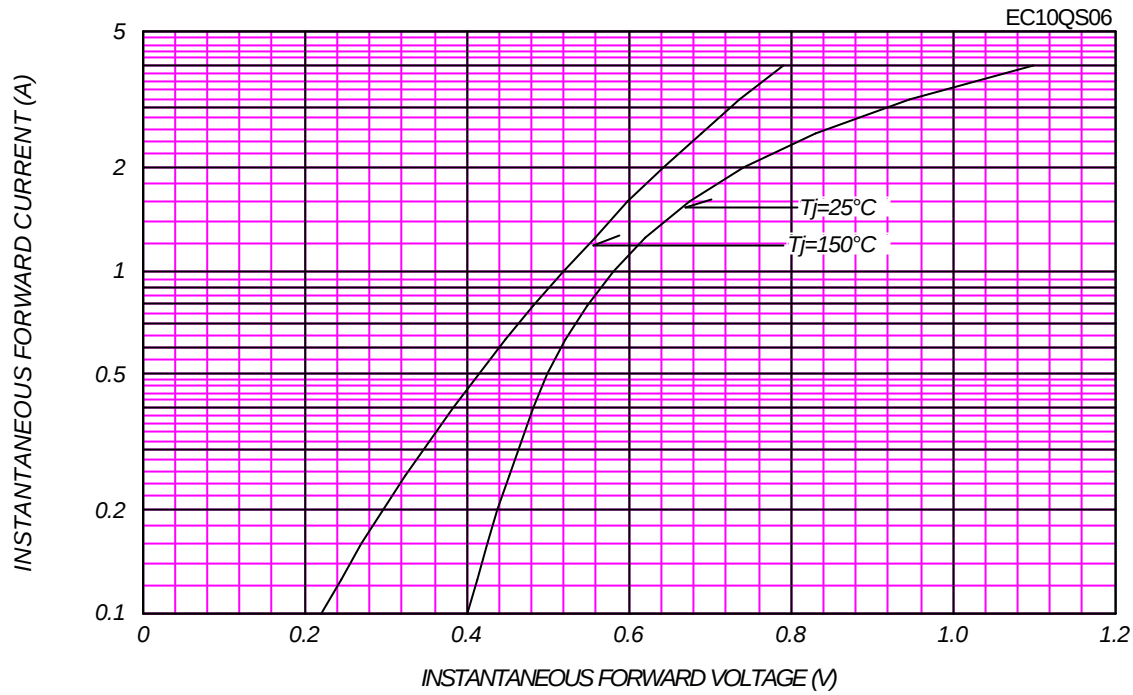
EC10QS06 OUTLINE DRAWING (Dimensions in mm)



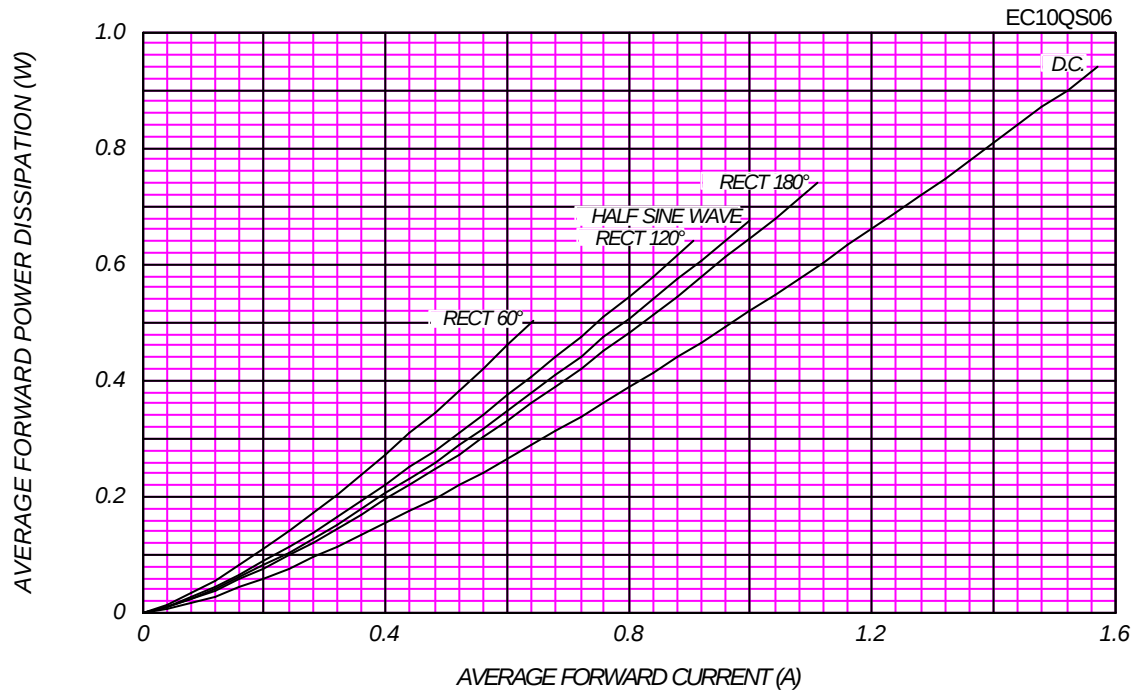
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



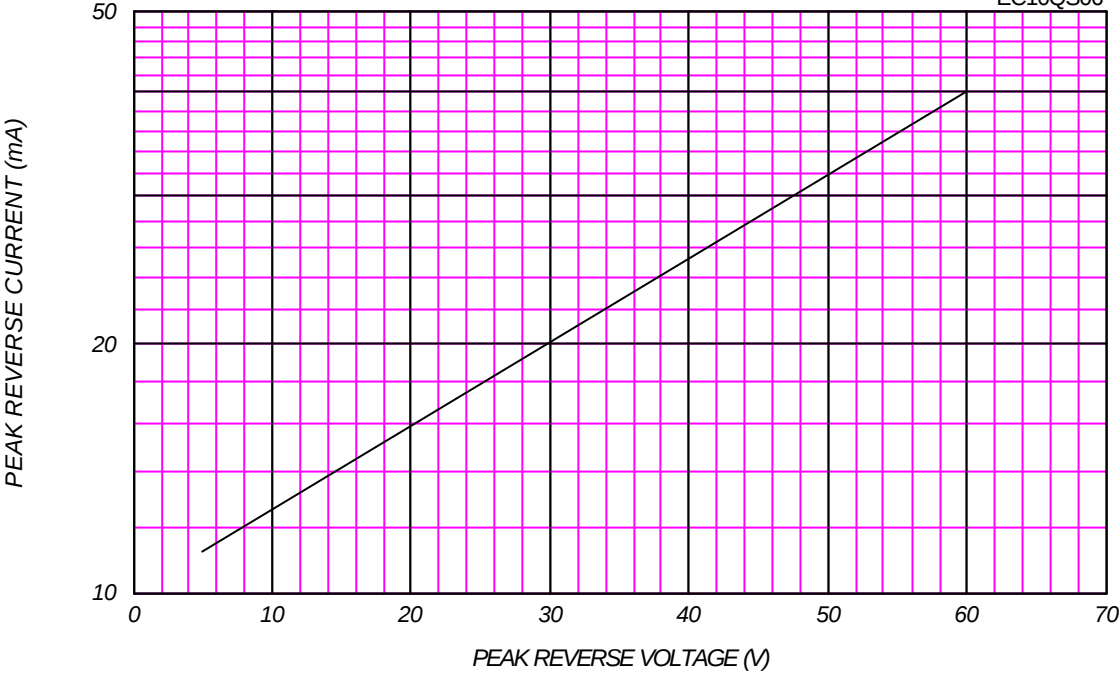
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

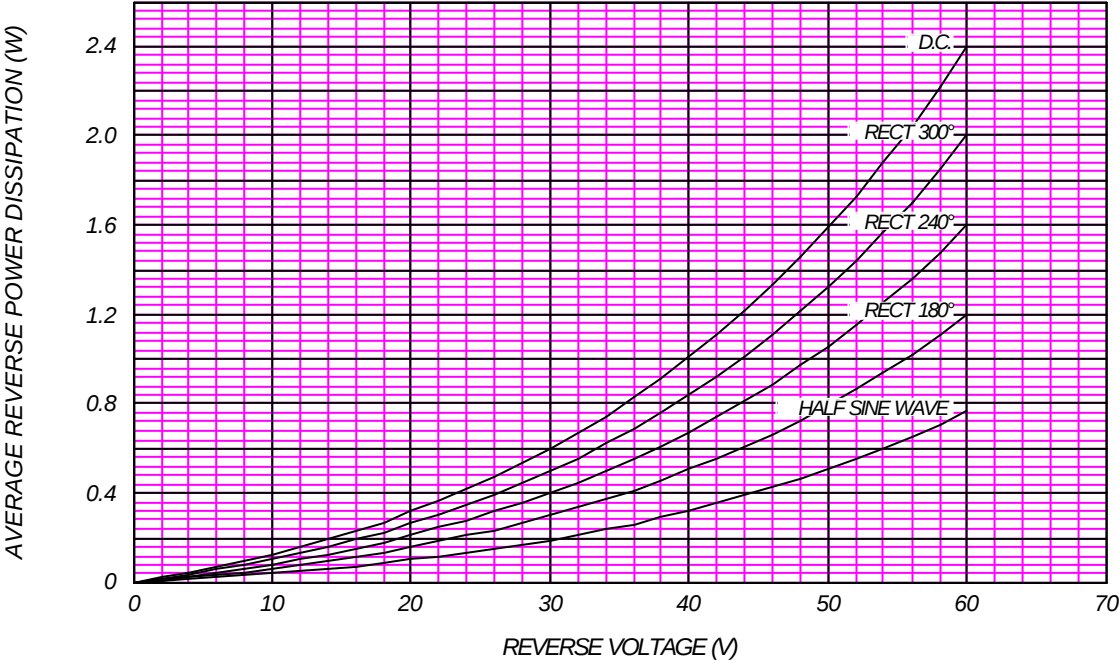
T_j = 150 °C

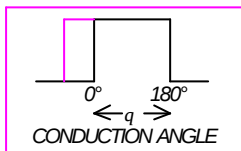
EC10QS06



AVERAGE REVERSE POWER DISSIPATION

EC10QS06

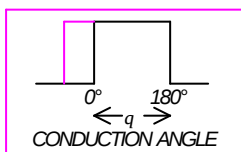
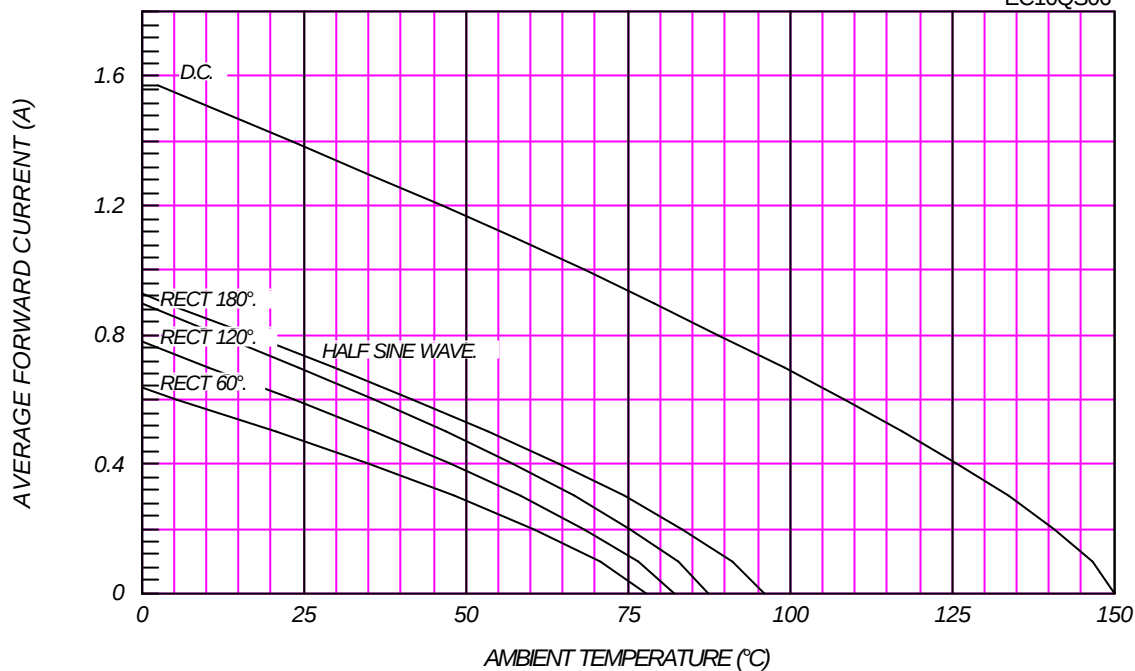




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate Mounted(Land=2×2mm), $V_{RM}=60V$

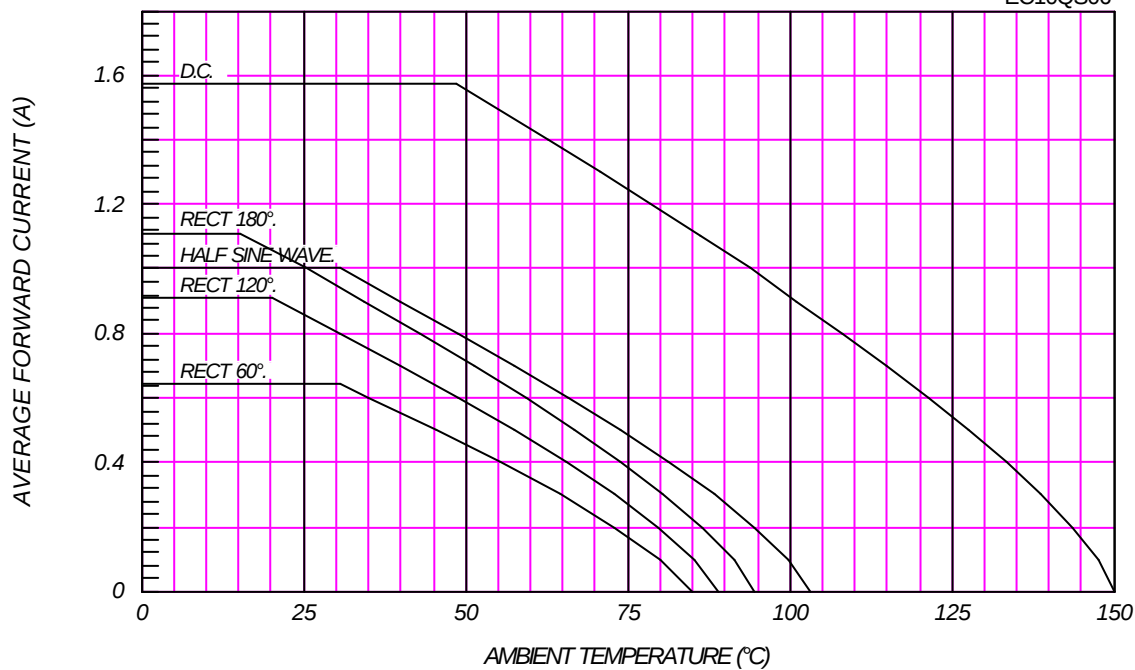
EC10QS06



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted(Land=2×2mm), $V_{RM}=60V$

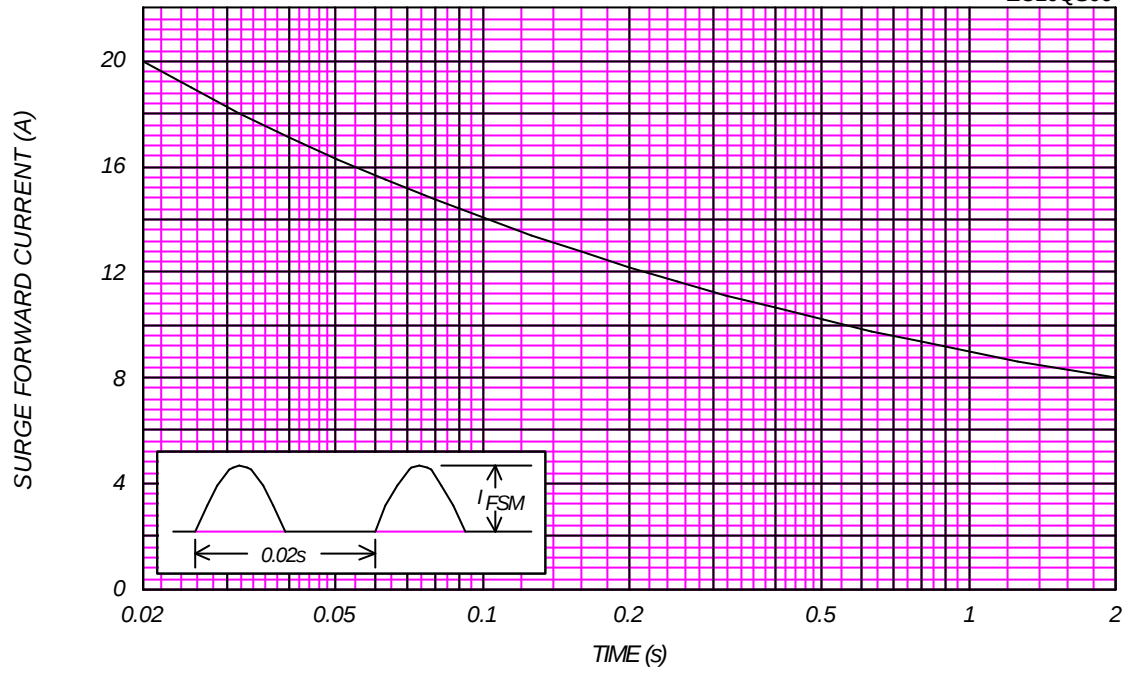
EC10QS06



SURGE CURRENT RATINGS

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

EC10QS06



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

EC10QS06

