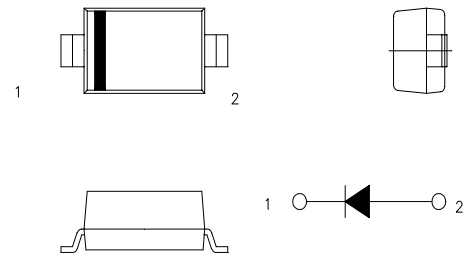


SBD Type : EP10QY03

FEATURES

- * JEDEC SOD-123 Package
- * Very Low profile 1.1mm Max
- * Extremely Low Forward Voltage Drop
- * Low Power Loss,High Efficiency
- * High Surge Capability
- * Low Thermal Resistance
- * Packaged in 8mm Tape and Reel

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:0.011g

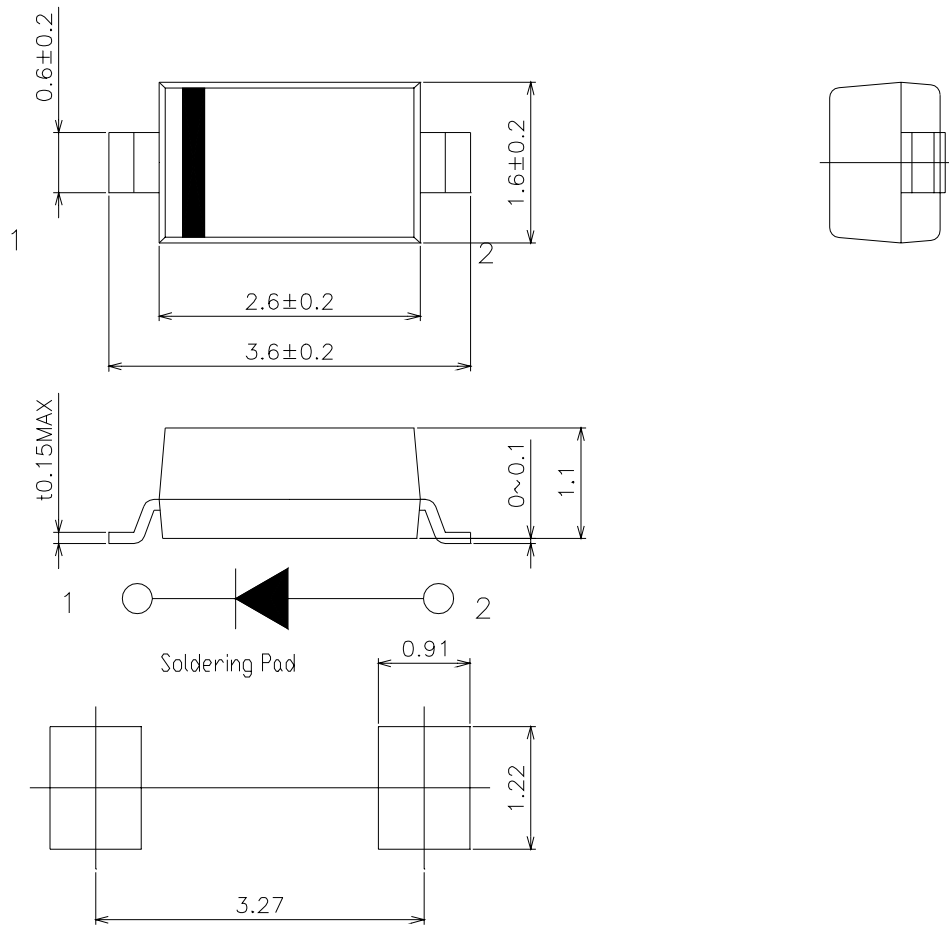
Rating	Symbol	EP10QY03			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30			V
Direct Forward Current	I_{dc}	1.0	$T_l=125^{\circ}C$	Direct Current	A
		1.0	$T_a=54^{\circ}C$ *1		
Average Rectified Output Current	I_O	0.8	$T_l=124^{\circ}C$	Rectangular Current	A
		0.8	$T_a=56^{\circ}C$ *1		
Surge Forward Current	I_{FSM}	12	50Hz Half Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T_{jw}	-40 to +150			$^{\circ}C$
Storage Temperature Range	T_{stg}	-40 to +150			$^{\circ}C$

Electrical • Thermal Characteristics

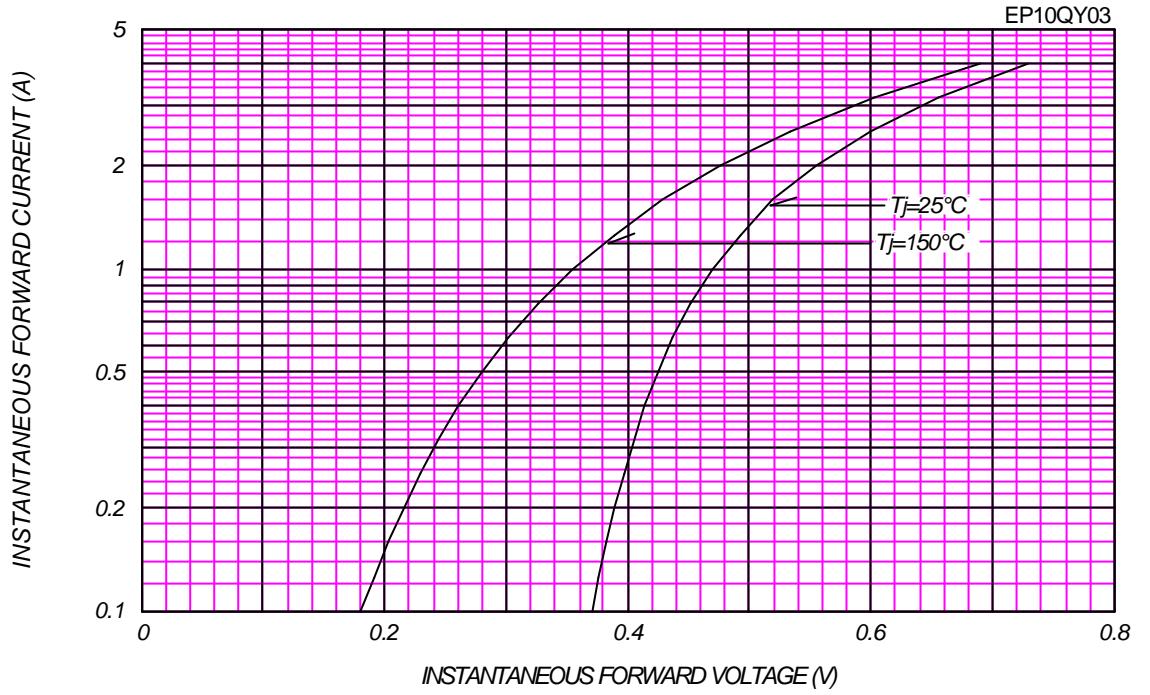
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}C, V_{RM}= V_{RRM}$	-	-	1	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}C, I_{FM}= 1.0A$	-	-	0.47	V
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient *	-	-	270	$^{\circ}C/W$
	$R_{th(j-l)}$	Junction to Lead	-	-	70	

*1: Glass Epoxy Substrate Mounted (Soldering Lands=1x1mm,Both Sides)
(T_l : Lead Temperature)

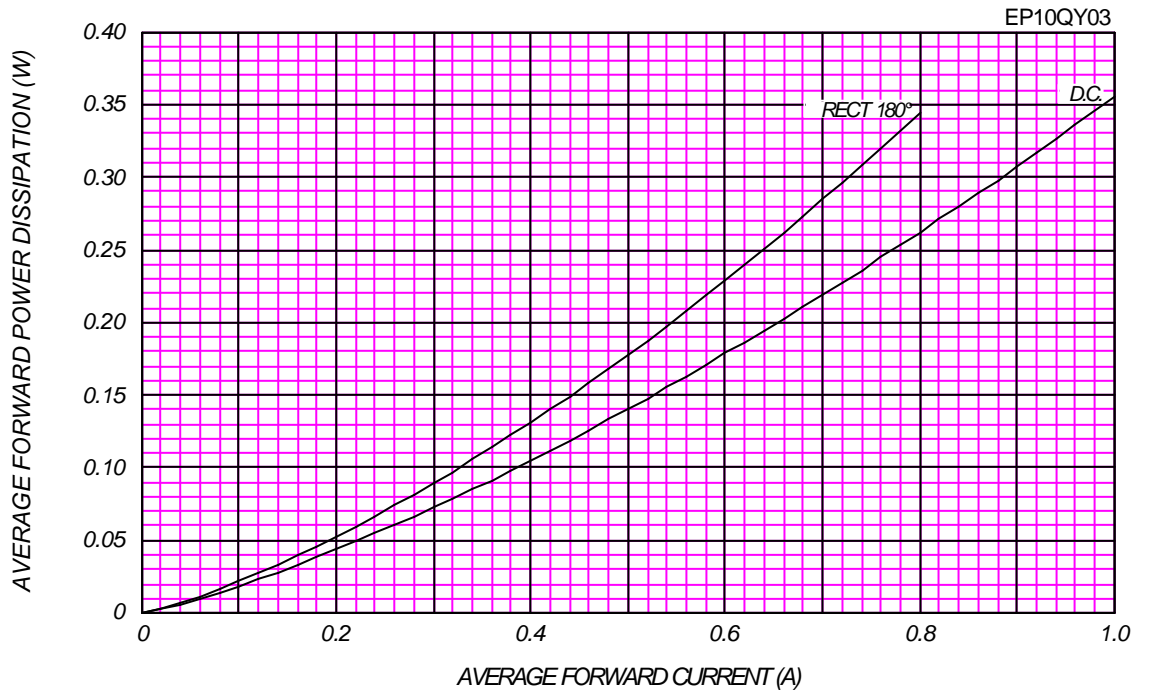
EP10QY03 OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



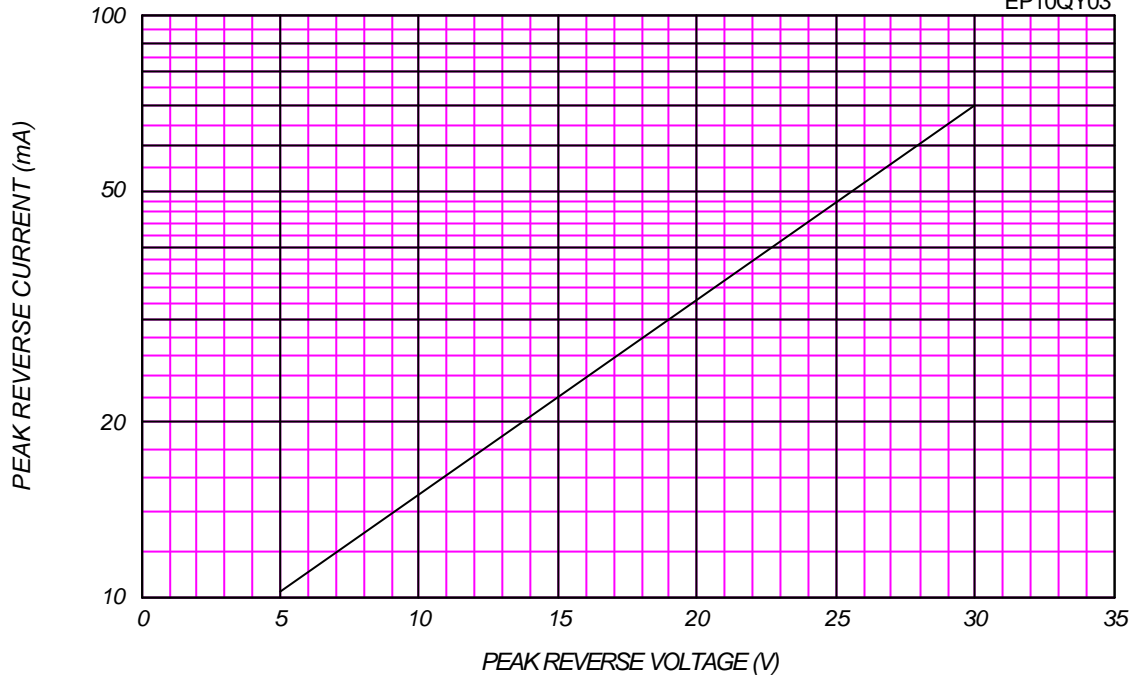
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

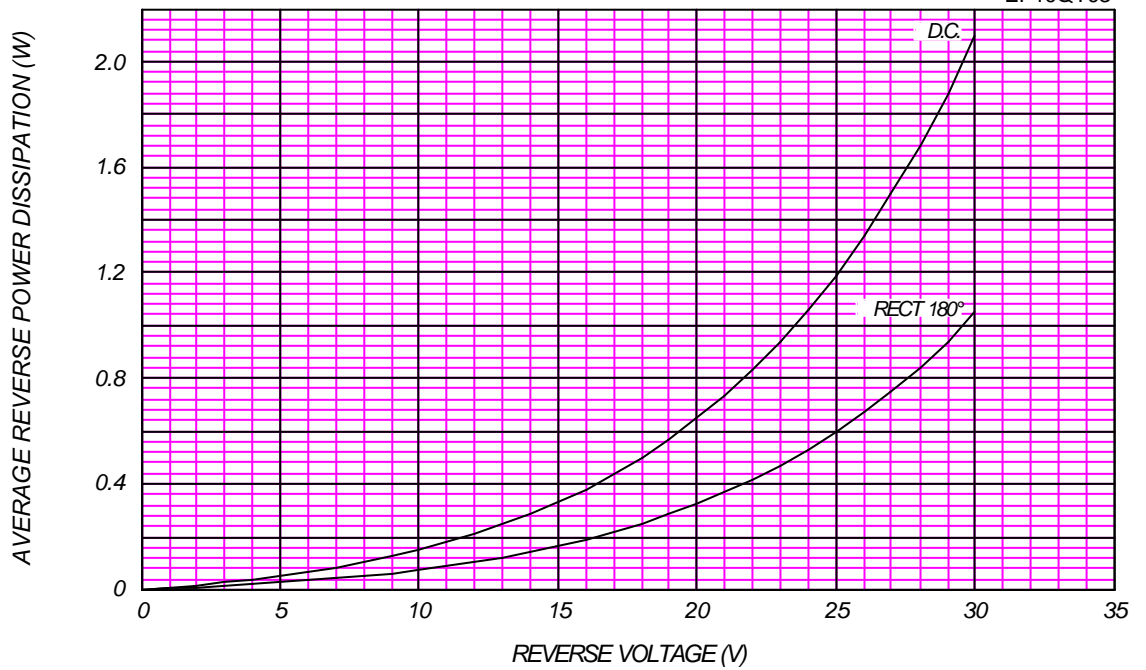
$T_j = 150\text{ }^\circ\text{C}$

EP10QY03

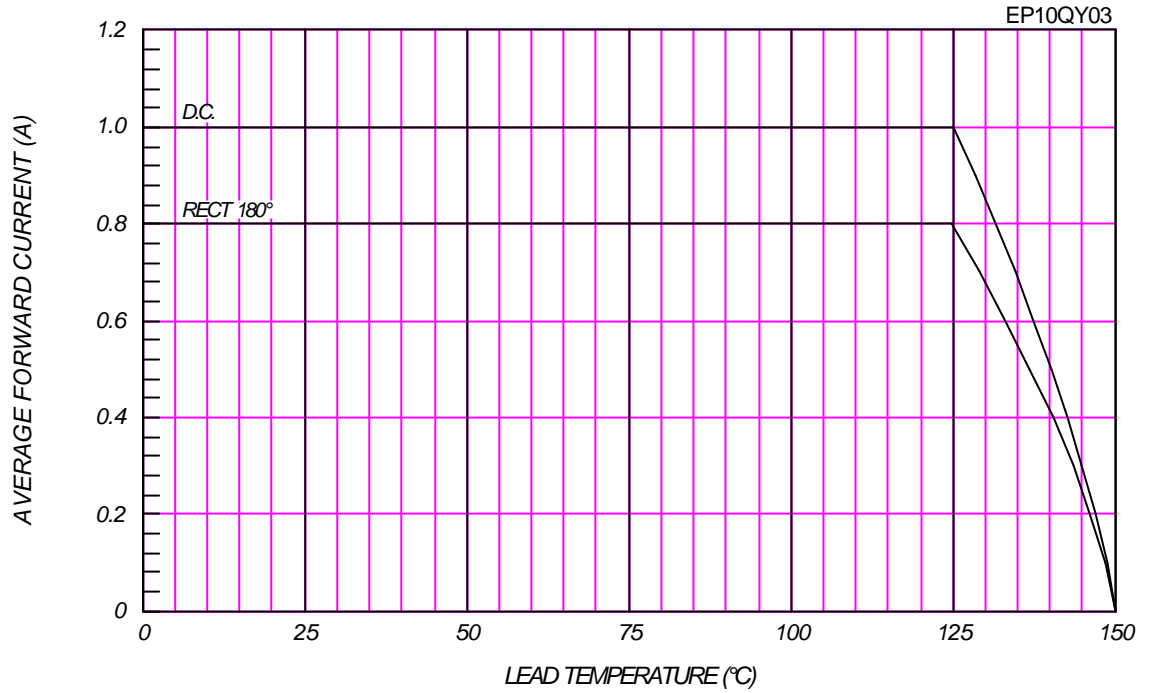


AVERAGE REVERSE POWER DISSIPATION

EP10QY03

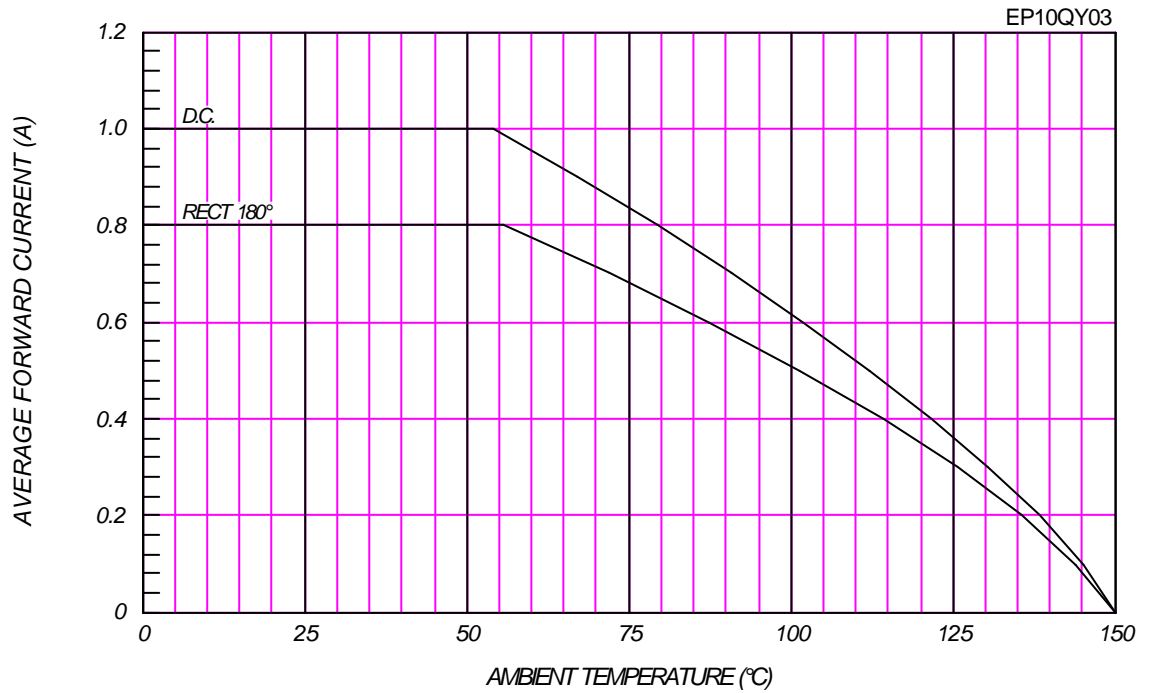


AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

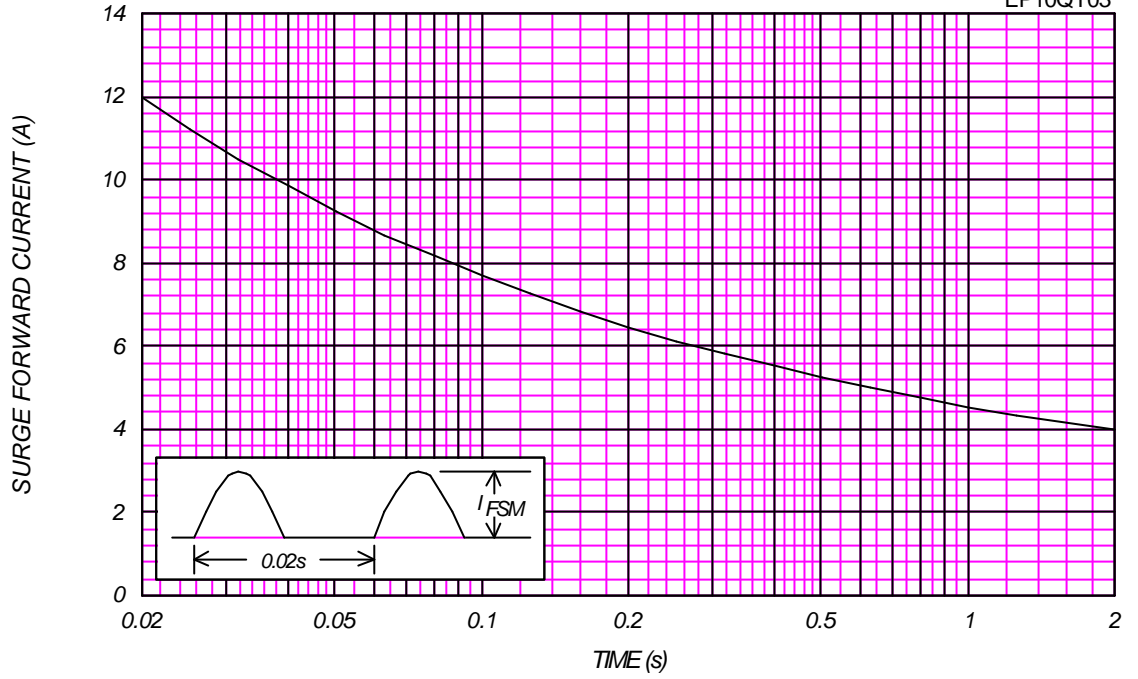
Glass-Epoxy Substrate Mounted (Soldering Land=1x1mm)



SURGE CURRENT RATINGS

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

EP10QY03



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

EP10QY03

