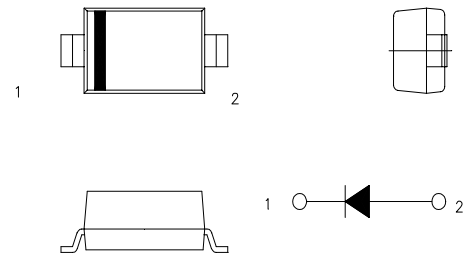


SBD Type : EP05Q04

FEATURES

- * JEDEC SOD-123 Package
- * Very Low profile 1.1mm Max
- * 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

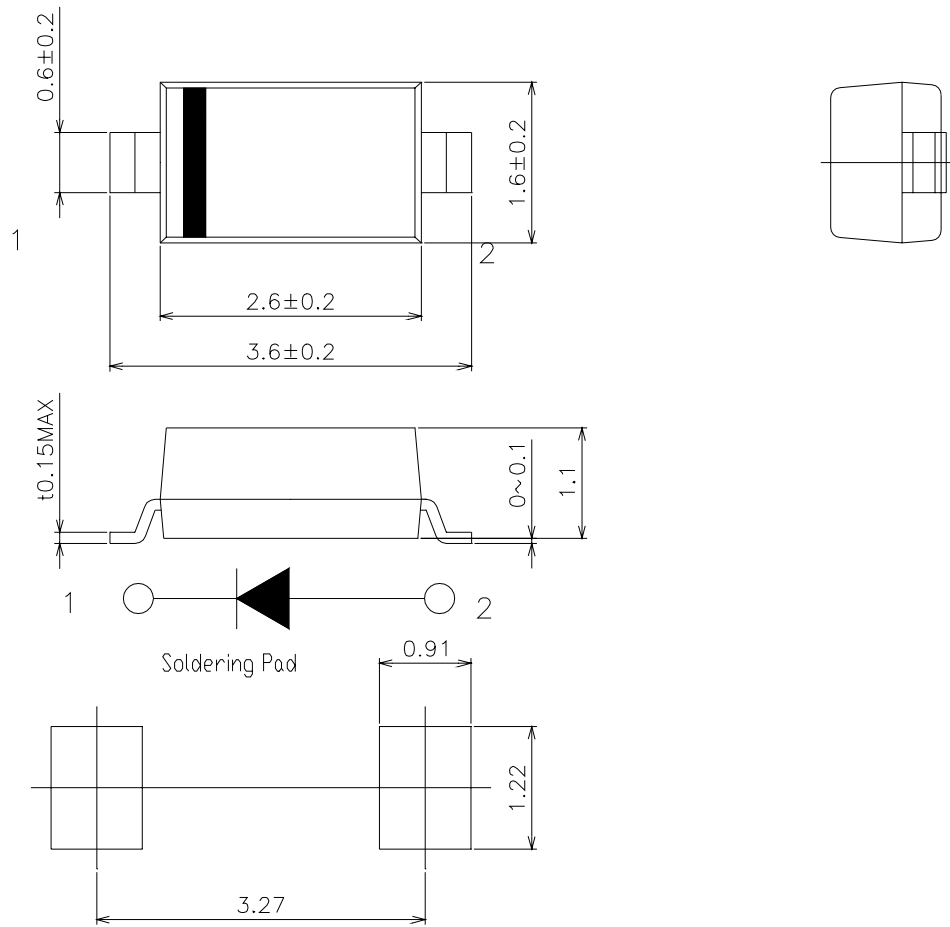
Rating	Symbol	EP05Q04			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	40			V
Average Rectified Output Current	I _O	0.43	Ta=25℃ * 1	50Hz Half Sine Wave, Resistive Load	A
		0.50	Tl=110℃		
RMS Forward Current	I _{F(RMS)}	0.785			A
Surge Forward Current	I _{FSM}	8	50Hz Half Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			℃
Storage Temperature Range	T _{stg}	-40 to +150			℃

Electrical • Thermal Characteristics

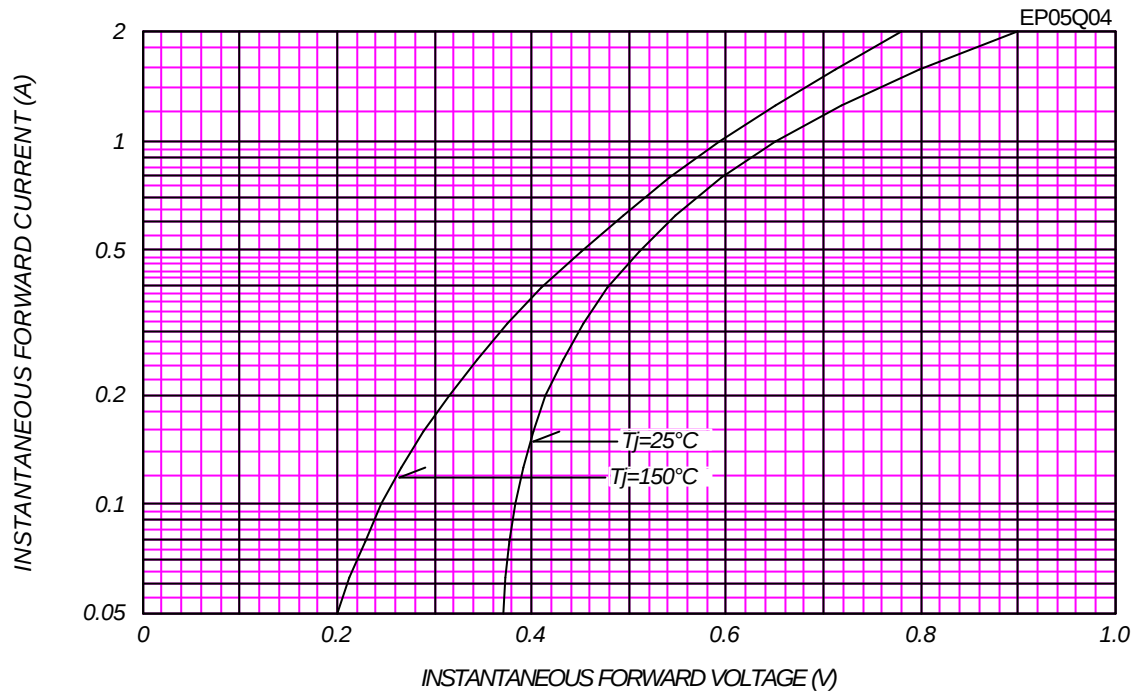
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}, V_{RM}= V_{RRM}$	-	-	100	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}\text{C}, I_{FM}=0.5\text{A}$	-	-	0.51	V
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient *	-	-	300	$^{\circ}\text{C} / \text{W}$
	$R_{th(j-l)}$	Junction to Lead	-	-	70	

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

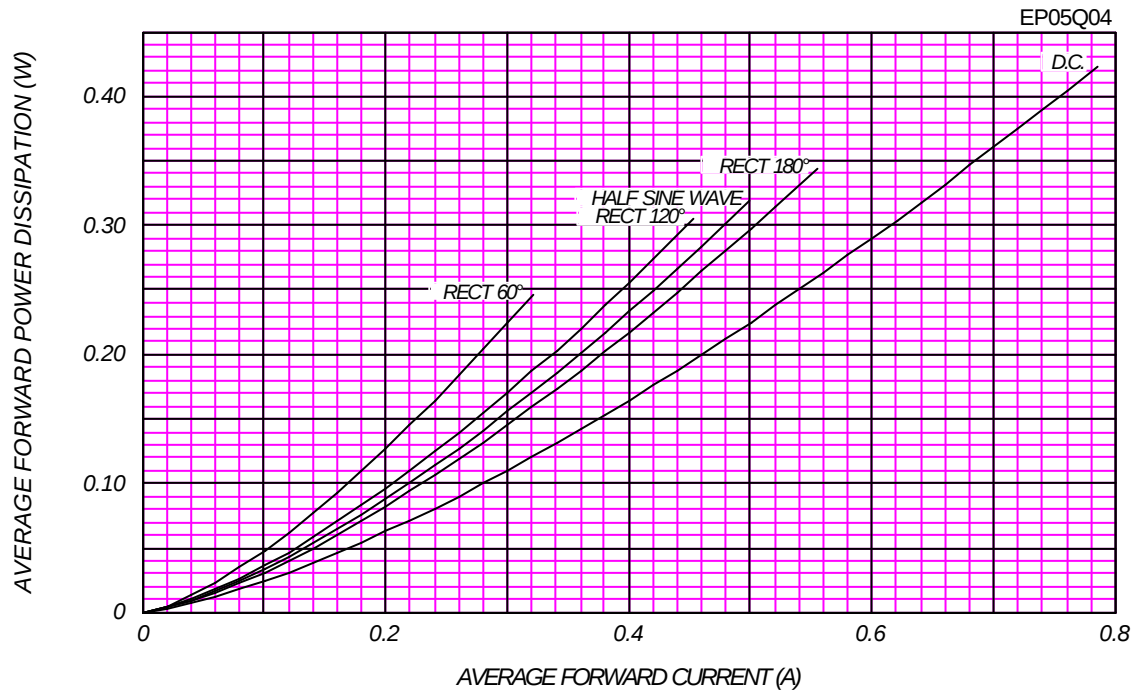
EP05Q04 OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



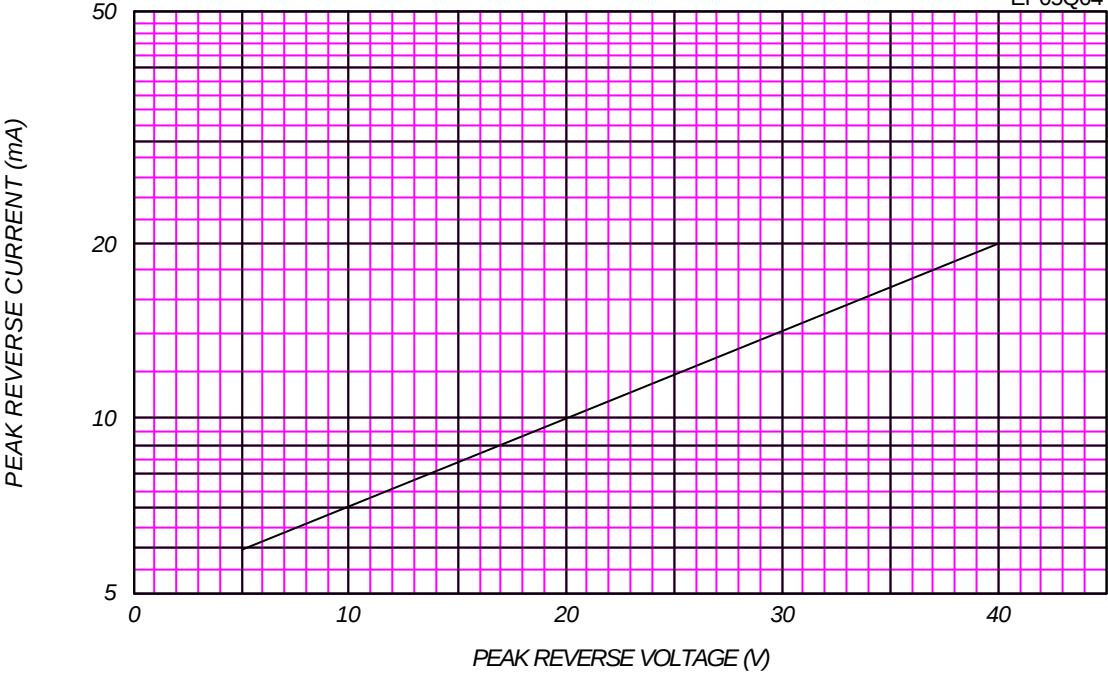
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

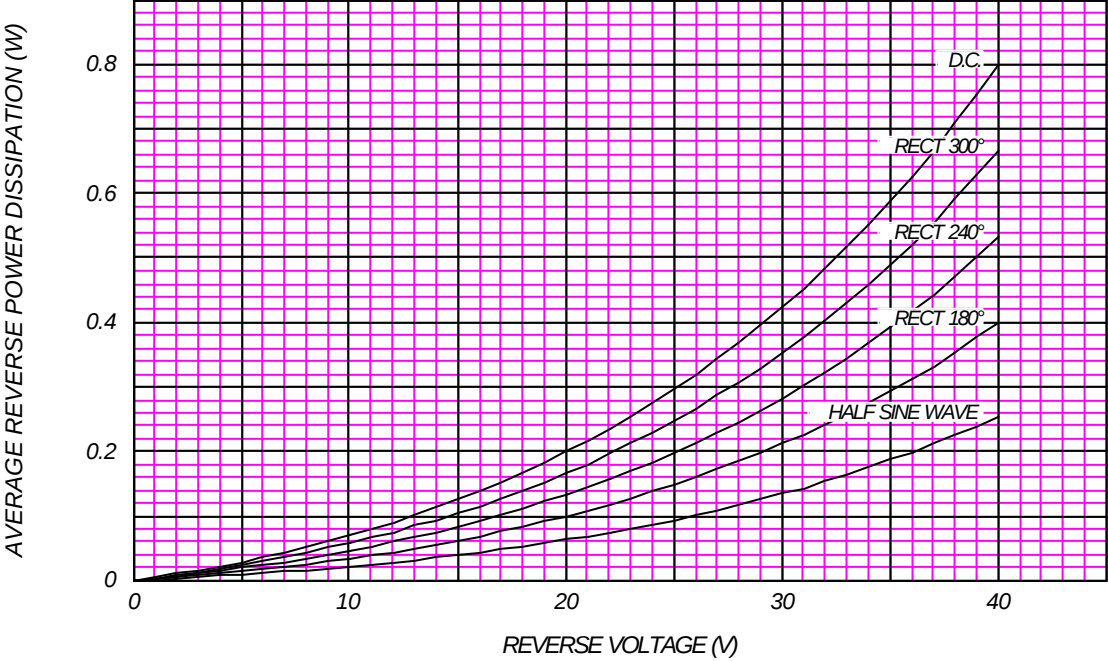
Tj= 150 °C

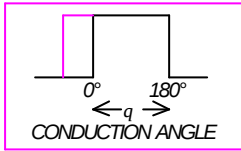
EP05Q04



AVERAGE REVERSE POWER DISSIPATION

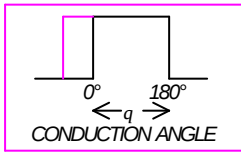
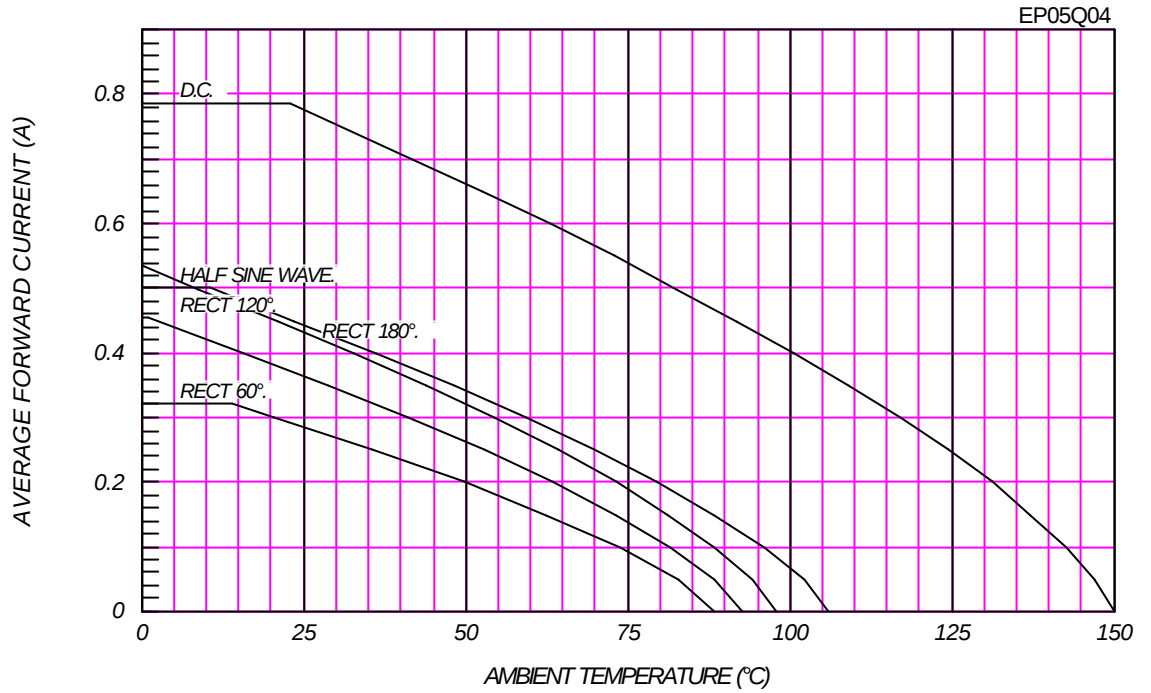
EP05Q04





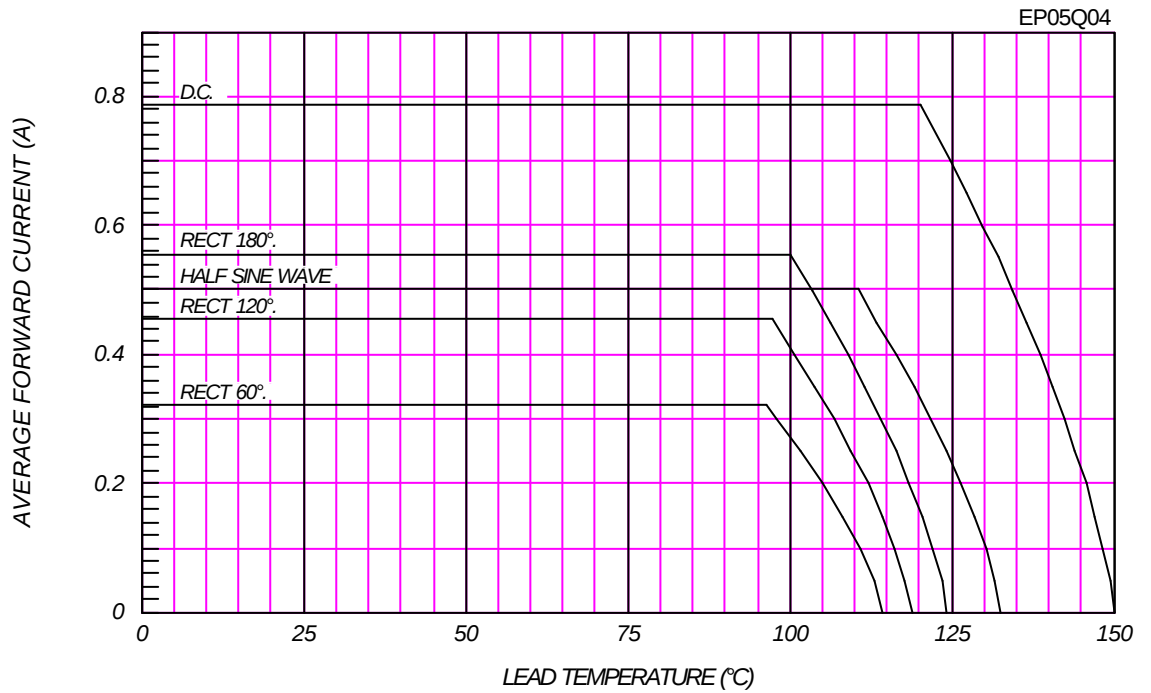
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate Mounted (Soldering Land=1×1mm), $V_{RM}=40V$



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

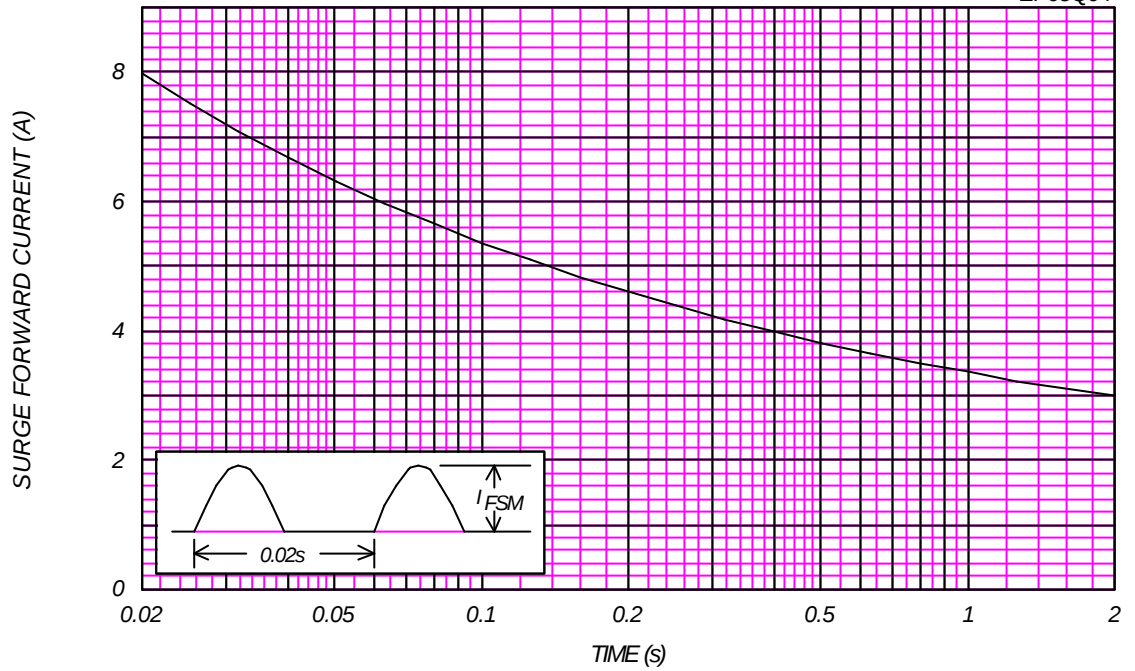
$V_{RM}=40V$



SURGE CURRENT RATINGS

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

EP05Q04



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

EP05Q04

