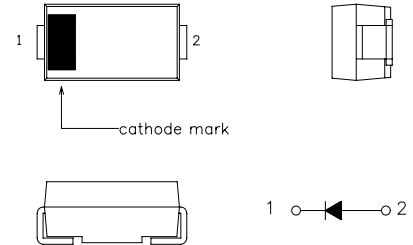


# FRD Type : EC8FS6

## FEATURES

- \* Miniature Size, Surface Mount Device
- \* Ultra-Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability
- \* Packaged in 12mm Tape and Reel
- \* Not Rolling During Assembly

## OUTLINE DRAWING



## Maximum Ratings

Approx Net Weight: 0.06g

Rating	Symbol	EC8FS6			Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	600			V
Average Rectified Output Current	I <sub>O</sub>	0.65	Ta=25°C *1	50Hz Half Sine	A
		0.8	Ta=35°C *2	Wave Resistive Load	
RMS Forward Current	I <sub>F(RMS)</sub>	1.256			A
Surge Forward Current	I <sub>FSM</sub>	20	50Hz Half Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T <sub>jw</sub>	-40 to +150			°C
Storage Temperature Range	T <sub>stg</sub>	-40 to +150			°C

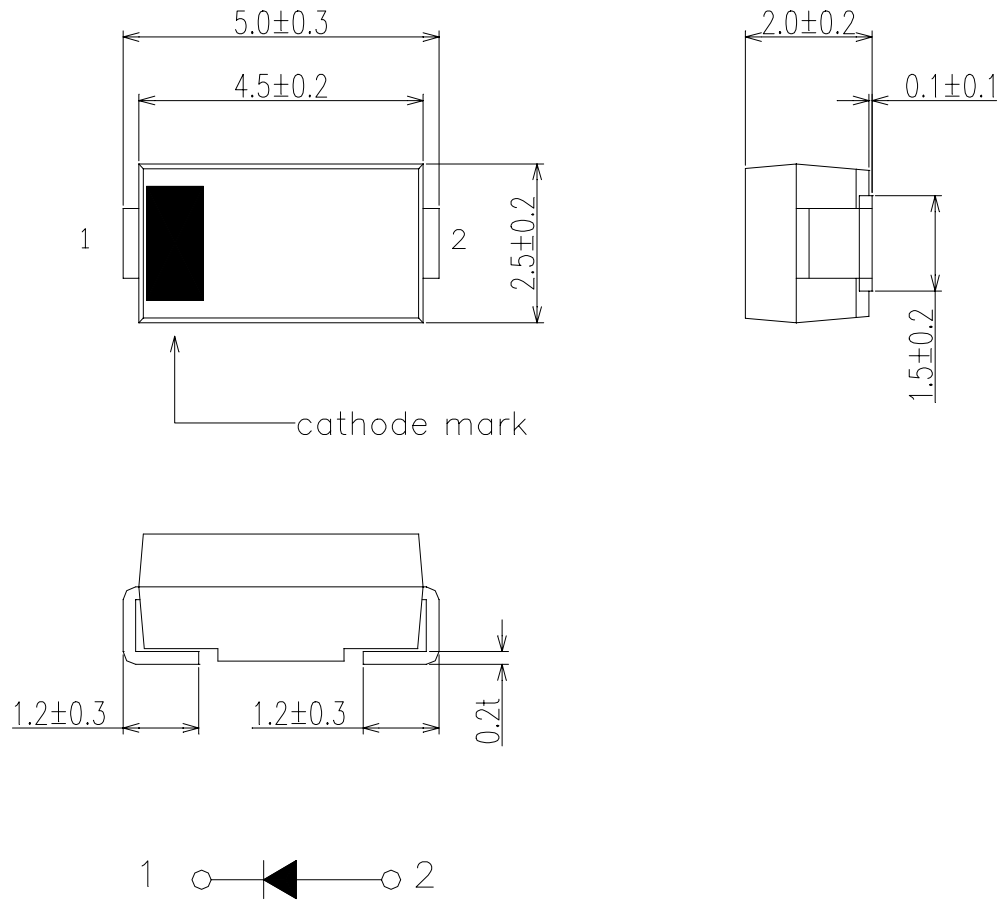
## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j = 25^\circ\text{C}$ , $V_{RM} = V_{RRM}$	-	-	20	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j = 25^\circ\text{C}$ , $I_{FM} = 0.8\text{A}$	-	-	1.32	V
Reverse Recovery Time	$t_{rr}$	$I_{FM} = 1\text{A}$ , $-di/dt = 50\text{A}/\mu\text{s}$ , $T_a = 25^\circ\text{C}$	-	-	80	ns
		$I_F = I_R = 10\text{mA}$ , $T_a = 25^\circ\text{C}$			0.4	$\mu\text{s}$
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	*1	-	157	$^\circ\text{C}/\text{W}$
			*2	-	108	

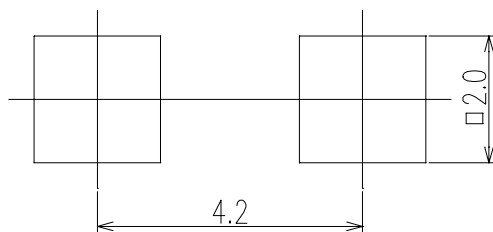
\*1 Glass Epoxy Substrate Mounted (Soldering Lands=2x2mm, Both Sides)

\*2 Alumina Substrate Mounted (Soldering Lands=2x2mm, Both Sides)

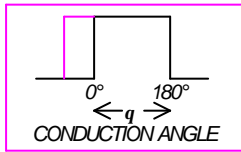
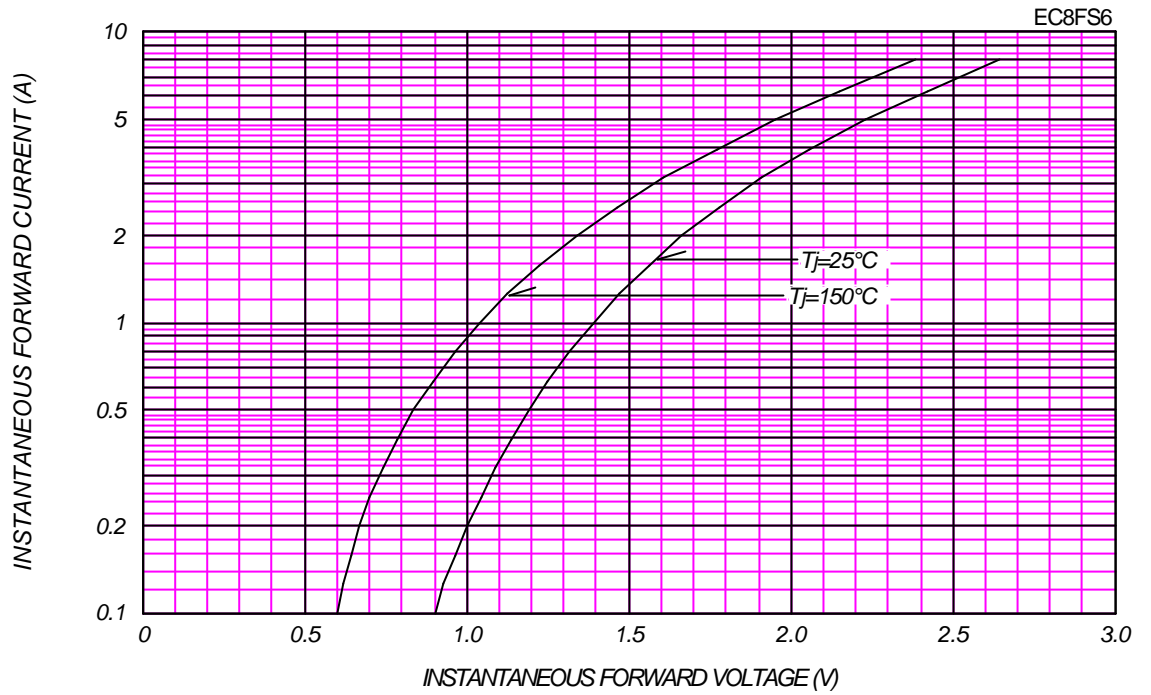
# EC\_FS\_ OUTLINE DRAWING (Dimensions in mm)



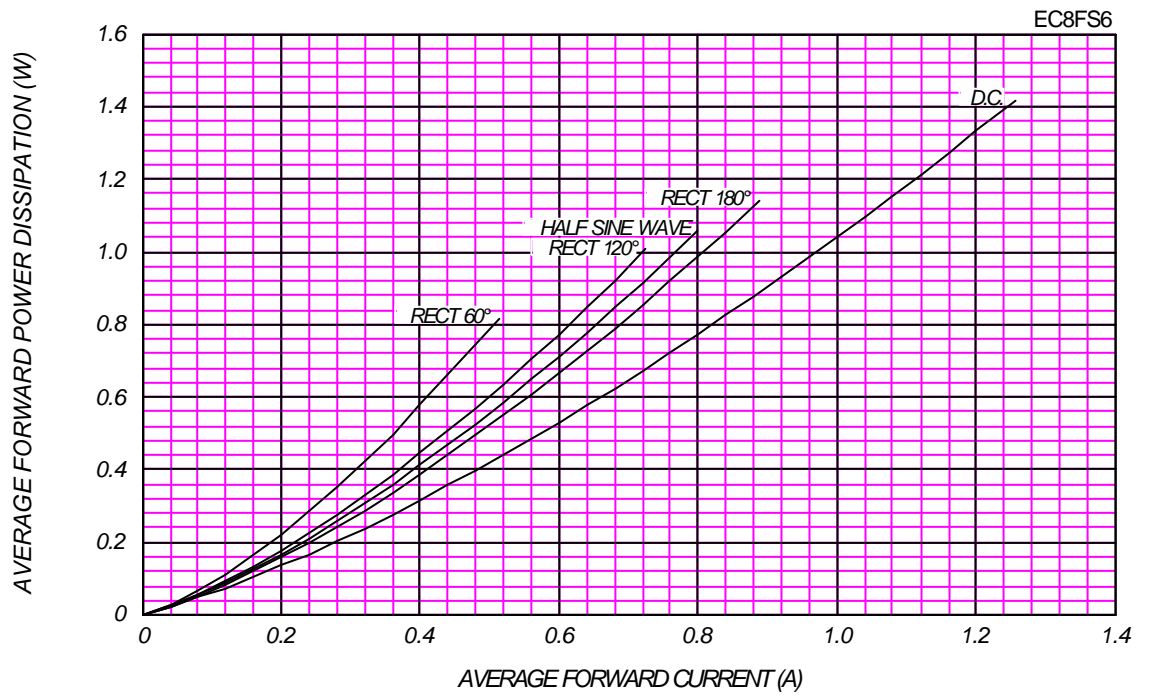
## SOLDERING PAD

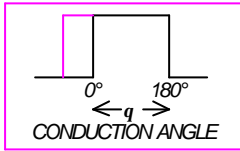


# FORWARD CURRENT VS. VOLTAGE



## AVERAGE FORWARD POWER DISSIPATION

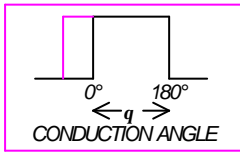
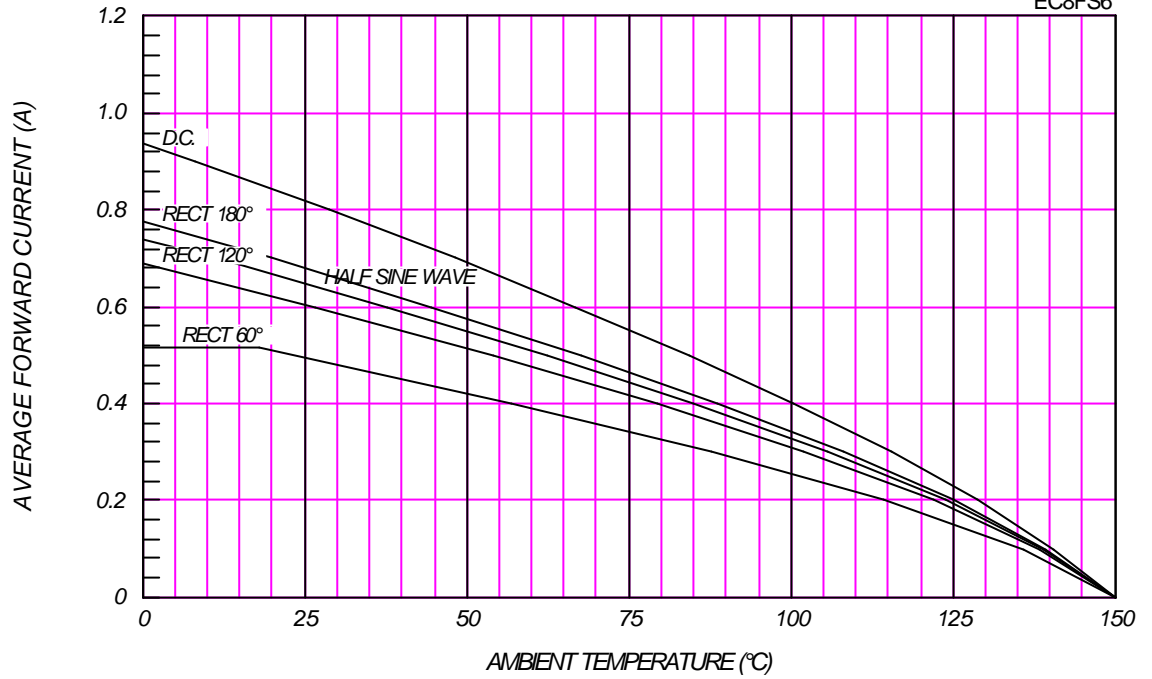




### AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate Mounted(Soldering Land=2x2mm)

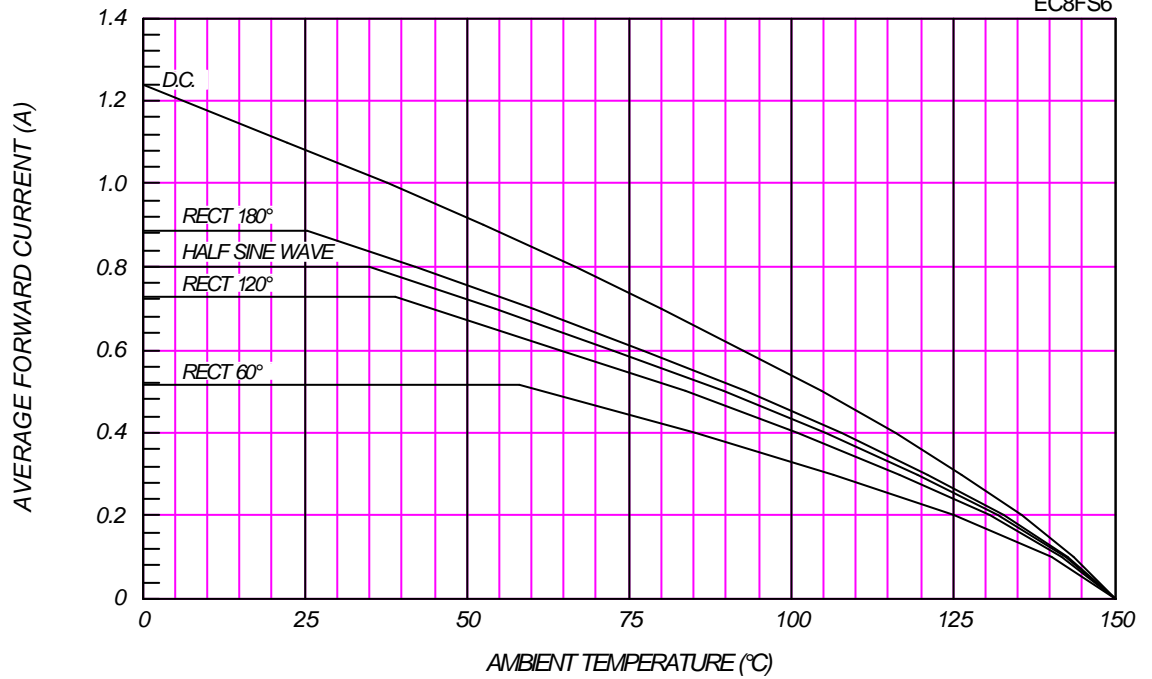
EC8FS6



### AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted(Soldering Land=2x2mm)

EC8FS6



# SURGE CURRENT RATINGS

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

EC8FS6

