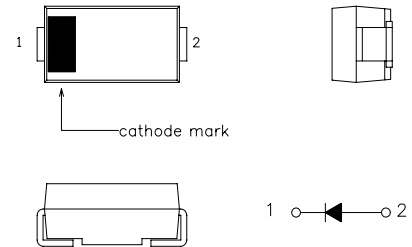


FRD Type : EC8FS6

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_{RRM}	600		V
Average Rectified Output Current	I_O	0.65	$T_a=25^{\circ}\text{C}$ *1	50Hz Half Sine Wave Resistive Load
		0.8	$T_a=35^{\circ}\text{C}$ *2	
RMS Forward Current	$I_{F(RMS)}$	1.256		A
Surge Forward Current	I_{FSM}	20	50Hz Half Sine Wave, 1cycle Non-repetitive	A
Operating Junction Temperature Range	T_{jw}	-40 to +150		$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 to +150		$^{\circ}\text{C}$

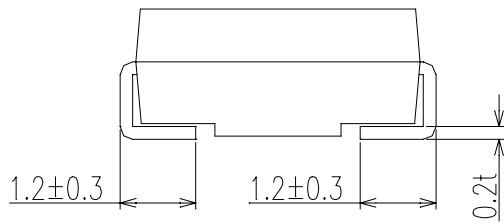
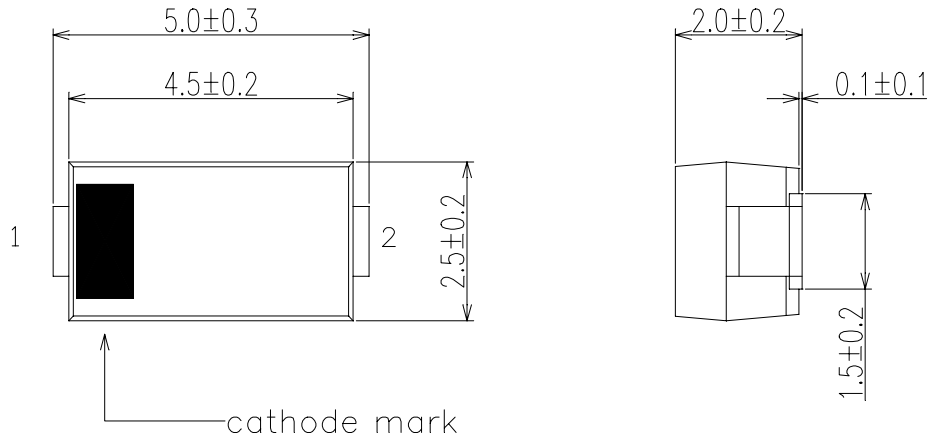
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit	
Peak Reverse Current	I_{RM}	$T_j = 25^{\circ}\text{C}$, $V_{RM} = V_{RRM}$	-	-	20	μA	
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	μs	
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	*1	-	-	157	$^{\circ}\text{C}/\text{W}$
			*2	-	-	108	

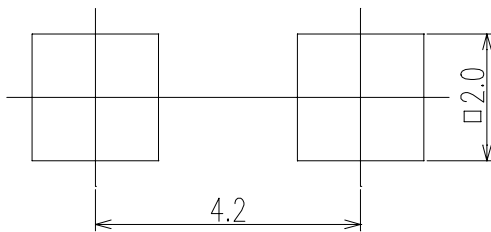
*1 Glass Epoxy Substrate Mounted (Soldering Lands=2x2mm, Both Sides)

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

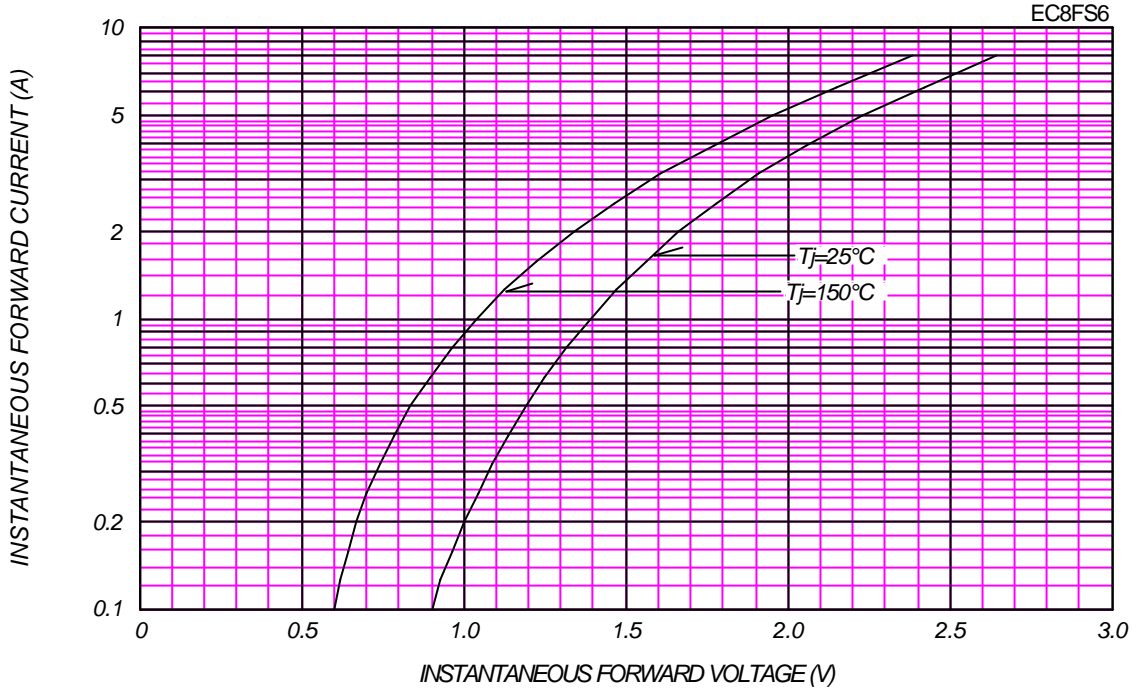
EC_FS_ OUTLINE DRAWING (Dimensions in mm)



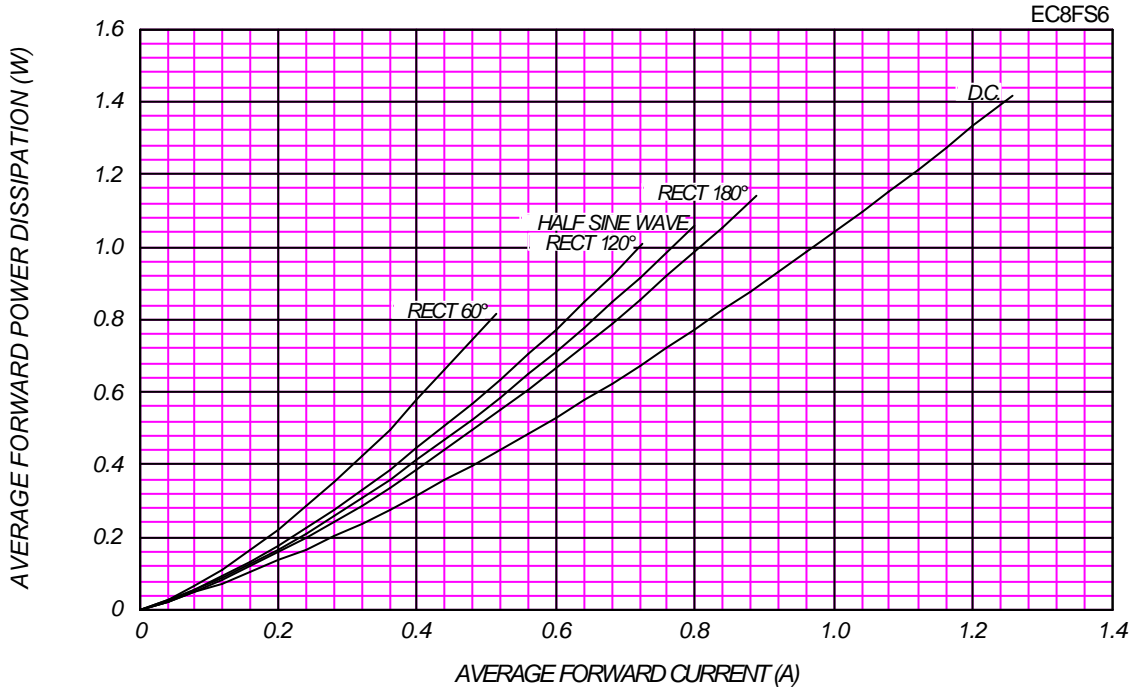
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



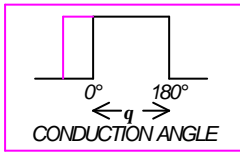
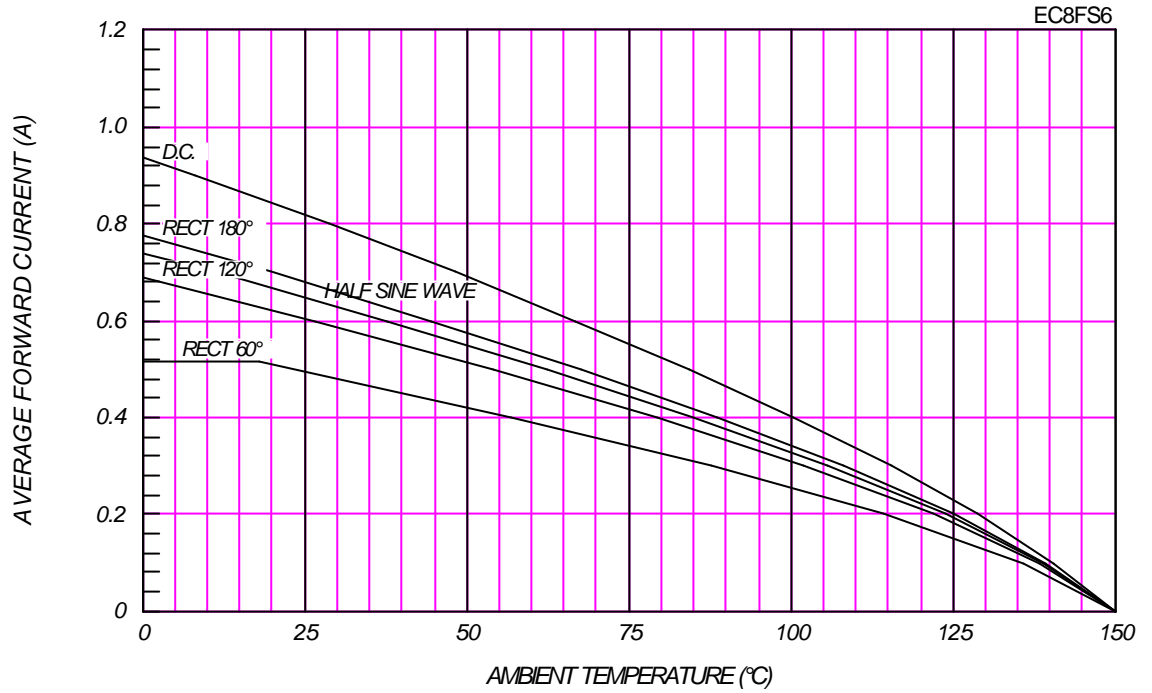
AVERAGE FORWARD POWER DISSIPATION





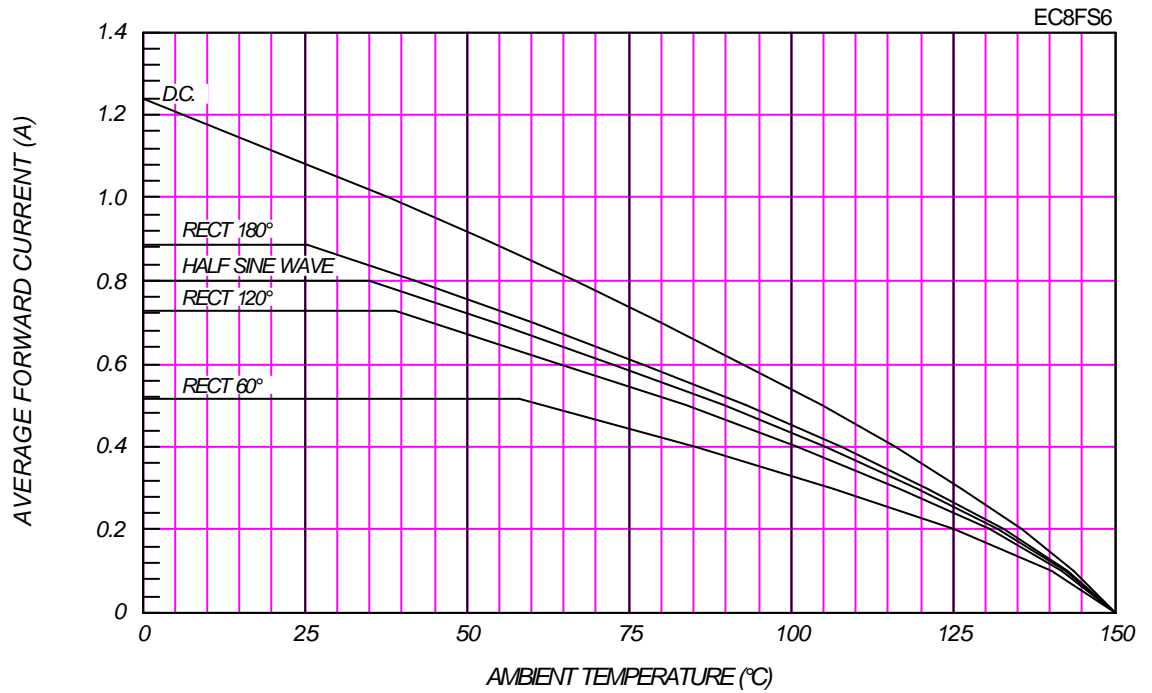
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

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



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted(Soldering Land=2x2mm)



SURGE CURRENT RATINGS

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

EC8FS6

