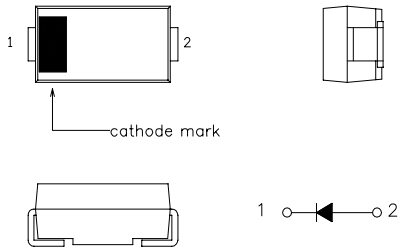
Nihon Inter Electronics Corporation

FRD Type : EC11FS4

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	EC11FS4			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	400			V
Non-repetitive Peak Reverse Voltage	V_{RSM}	440			V
Average Rectified Output Current	I_O	0.76	Ta=25℃ *1	50Hz Half Sine Wave Resistive Load	A
		1.0	Ta=26℃ *2		
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			℃
Storage Temperature Range	T_{stg}	-40 to +150			℃

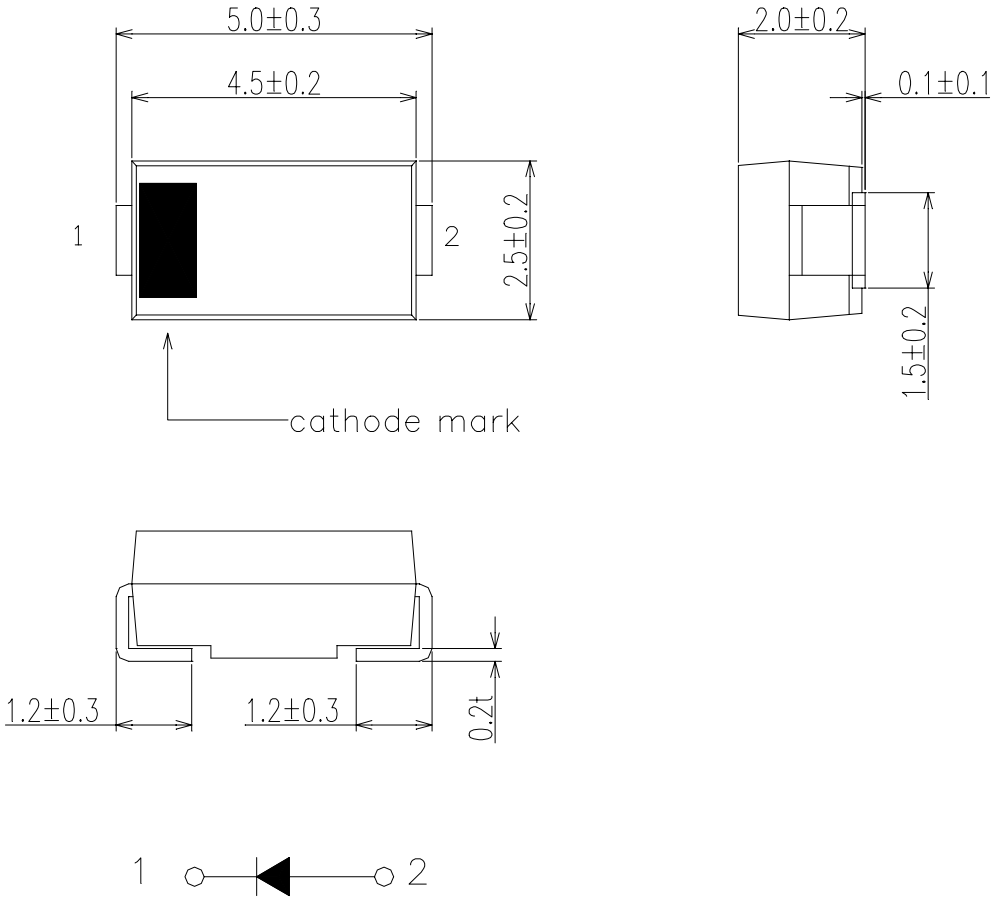
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions		Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}		-	-	20	μA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 1.0A		-	-	1.25	V
Reverse Recovery Time	trr	I_{FM}= 1A, -di/dt= 50A/μs, Ta= 25°C		-	-	30	ns
Thermal Resistance	$Rth_{(j-a)}$	Junction to Ambient	*1	-	-	157	℃ /W
			*2	-	-	108	

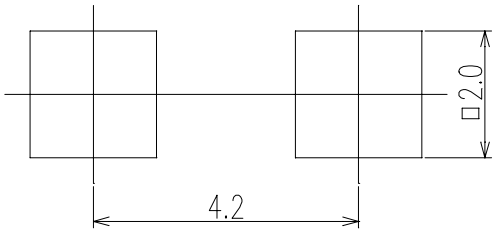
*1 Glass Epoxy Substrate Mounted (Soldering Lands=2x2mm,Both Sides)

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

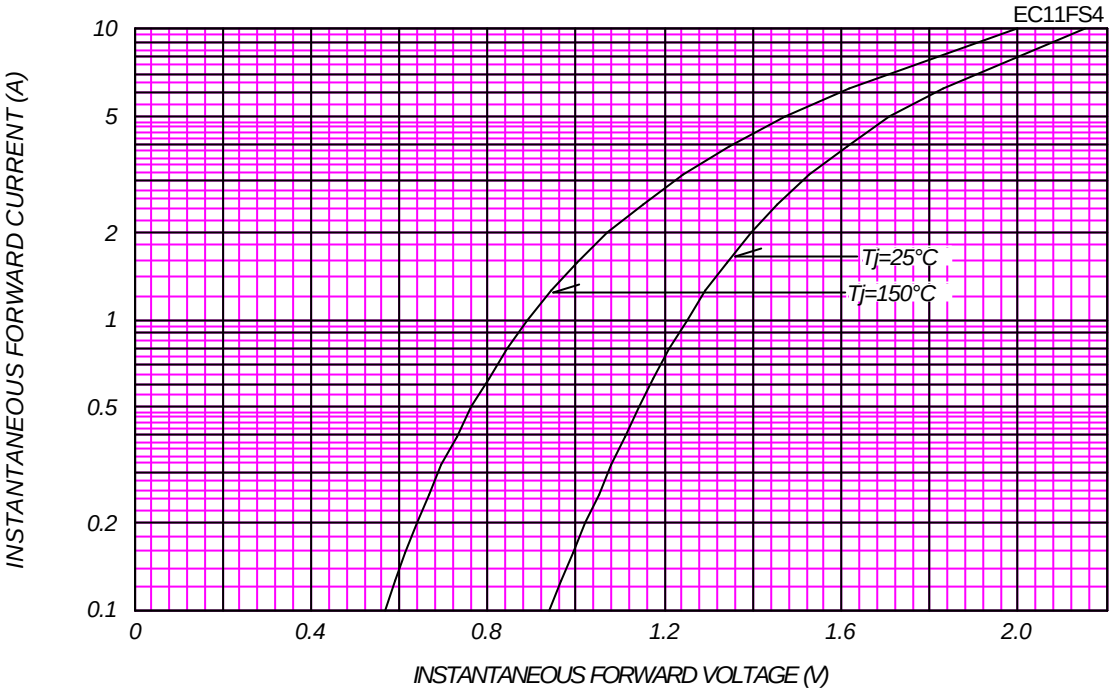
EC11FS_ OUTLINE DRAWING (Dimensions in mm)

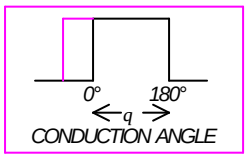


SOLDERING PAD

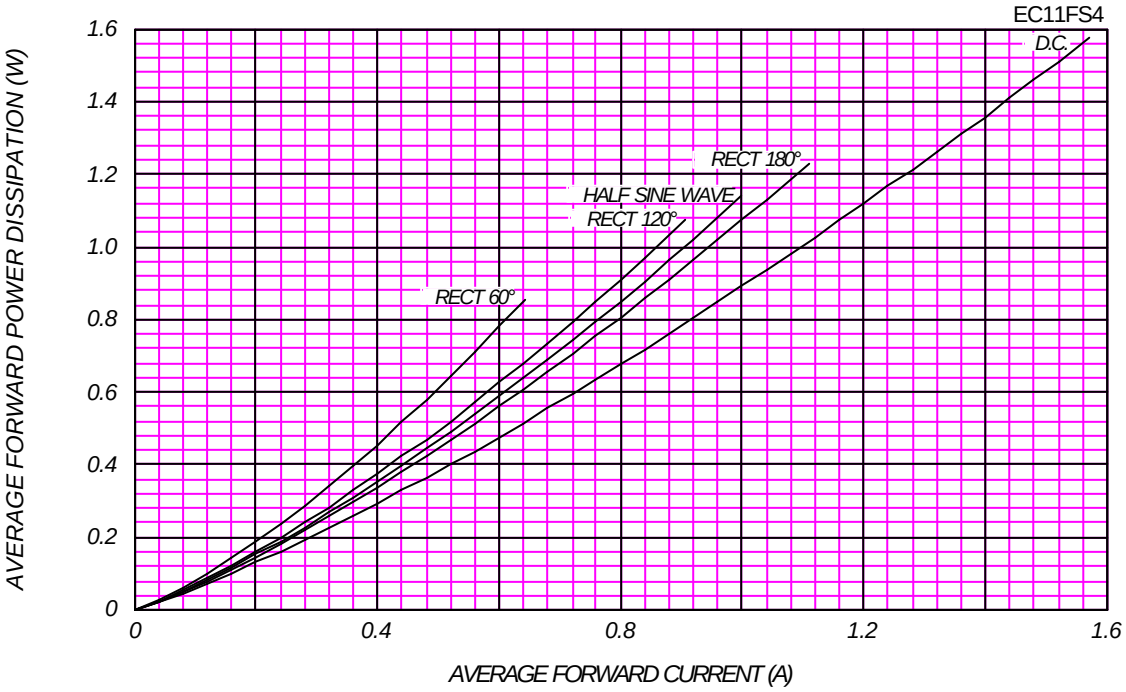


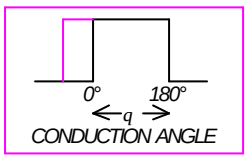
FORWARD CURRENT VS. VOLTAGE





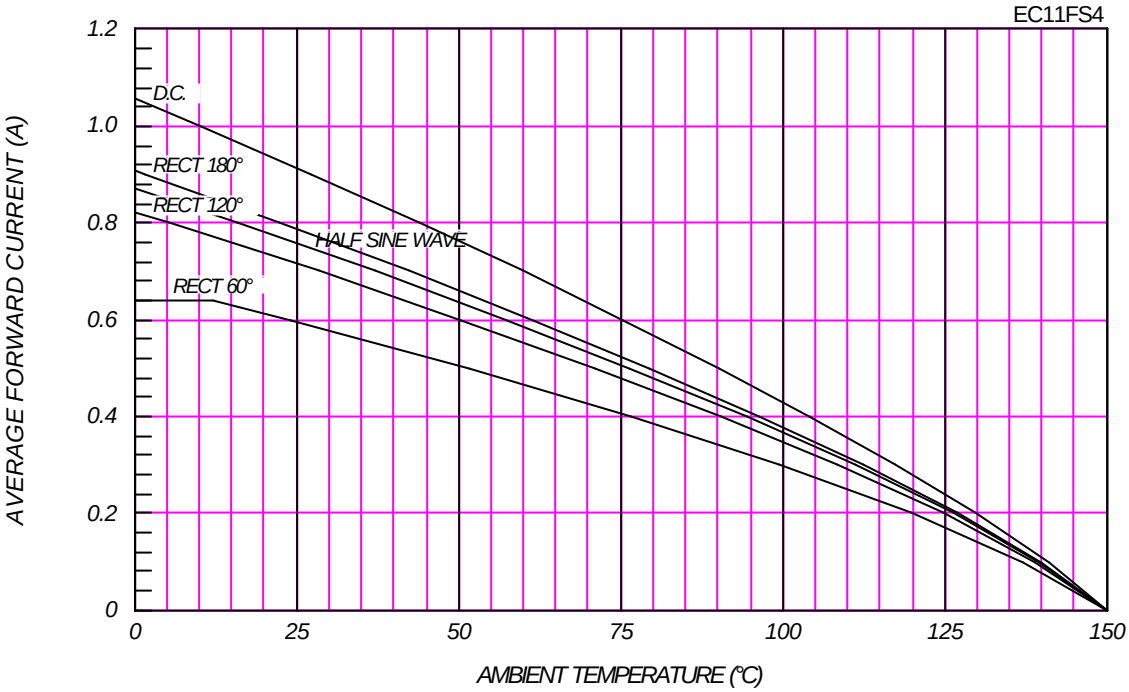
AVERAGE FORWARD POWER DISSIPATION

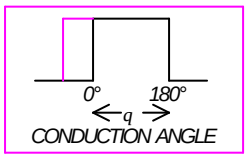




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

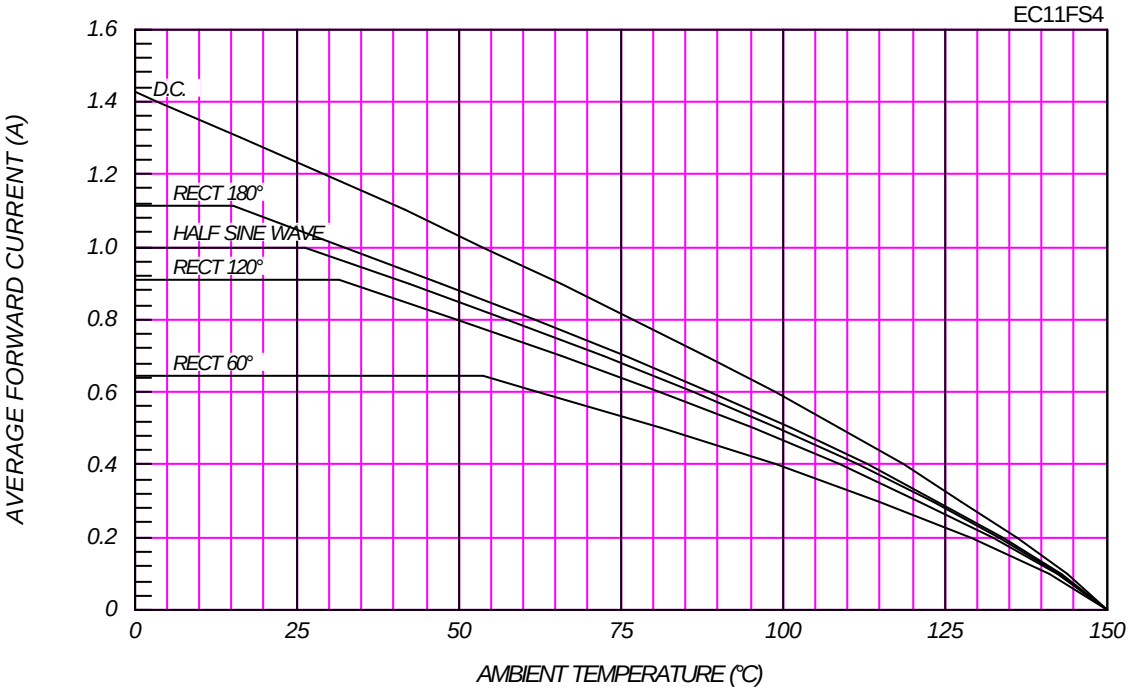
Glass-Epoxy Substrate Mounted(Soldering Land=2×2mm)





AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted(Soldering Land=2×2mm)



SURGE CURRENT RATINGS

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

EC11FS4