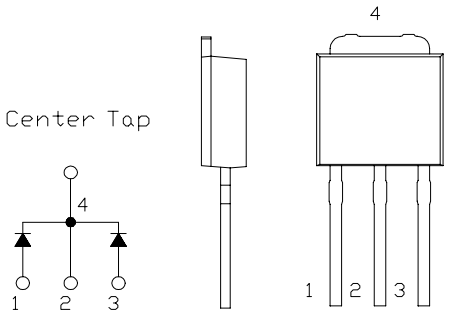
Nihon Inter Electronics Corporation

FRD Type : ECU06B60

6A 600V 27ns

OUTLINE DRAWING



FEATURES

* TO-251AA Case
* Ultra – Fast Recovery
* Low Power Loss

APPLICATIONS

For Powert Factor Inprovement

High Frequency Rectification

Maximum Ratings

Approx Net Weight:0.35g

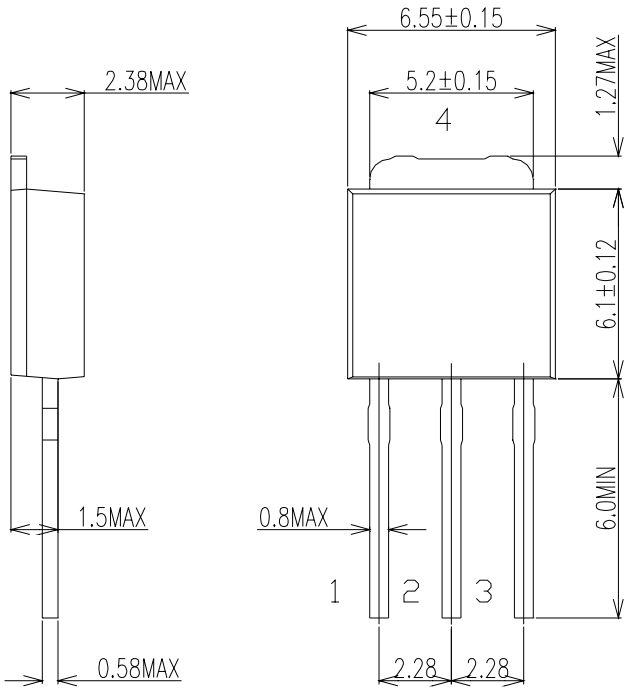
Rating		Symbol	ECU06B60			Unit
Repetitive Peak Reverse Voltage		V_{RRM}	600			V
Average Rectified Output Current	P.C.Board mounted *1	I_O	1.1	Ta=25°C	50Hz Full Sine Wave Resistive Load	A
	-		6.0	Tc=77°C		
RMS Forward Current		$I_{F(RMS)}$	6.66			A
Surge Forward Current		I_{FSM}	35	50Hz Full Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range		Tjw	- 40 to + 150			°C
Storage Temperature Range		Tstg	- 40 to + 150			°C

Electrical • Thermal Characteristics

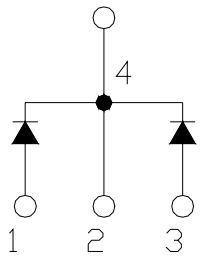
Characteristics		Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current		I_{RM}	Tj=25°C,V_{RM}=V_{RRM} per Arm	-	-	20	μA
Peak Forward Voltage		V_{FM}	Tj=25°C,I_{FM}= 3 A per Arm	-	2.2	2.7	V
Reverse Recovery Time		trr	I_{FM}= 3 A, -di/dt= 50 A/μs, Ta= 25°C	-	17	27	ns
Thermal Resistance	Junction to Ambient	Rth(j-a)	P.C.Board mounted *1	-	-	80	°C/W
	Junction to Case	Rth(j-c)	-	-	-	5	°C/W

* Print Land = 20x20 mm

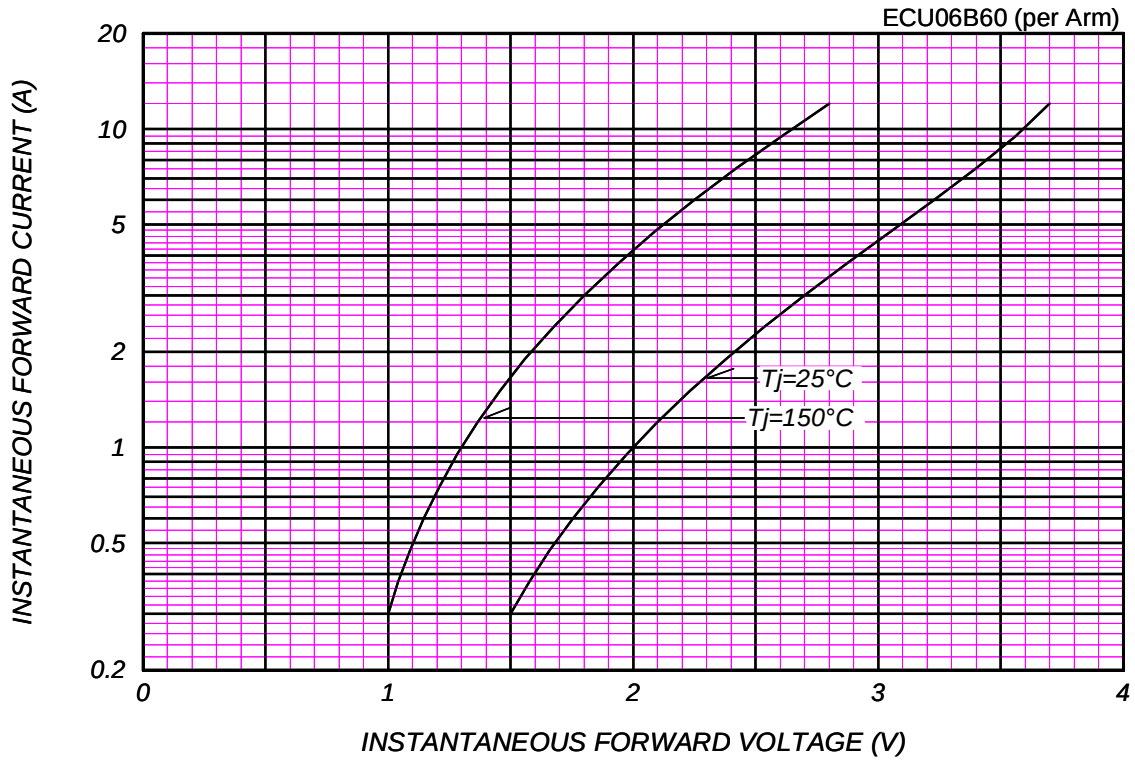
ECU06B60 OUTLINE DRAWING (Dimensions in mm)

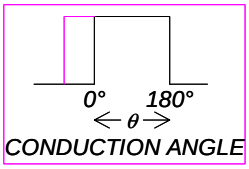


Center Tap

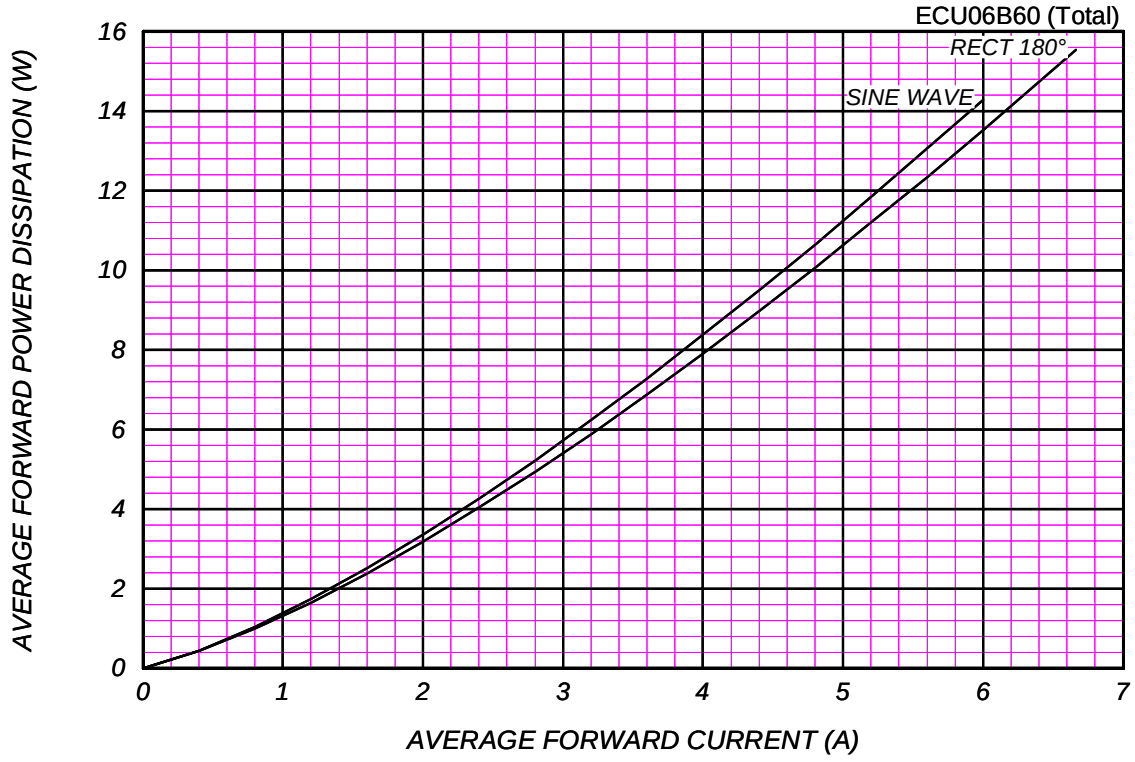


FORWARD CURRENT VS. VOLTAGE

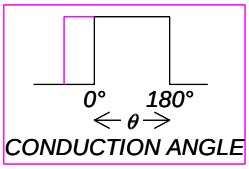




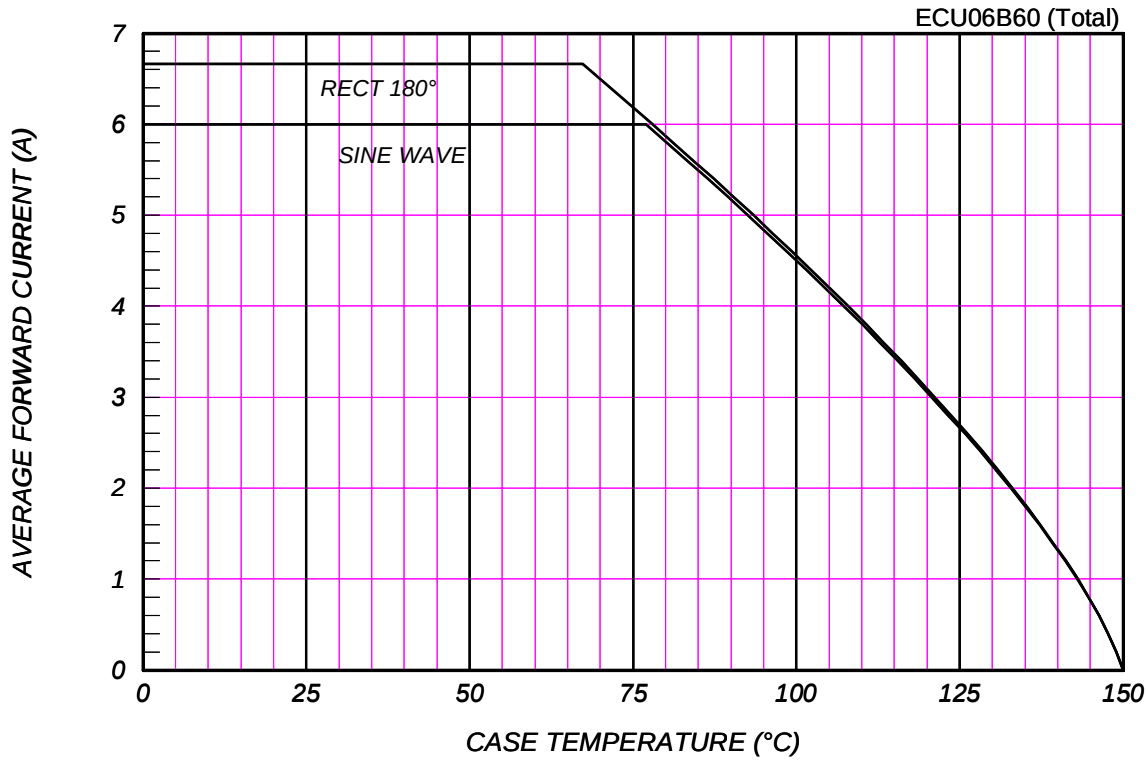
AVERAGE FORWARD POWER DISSIPATION

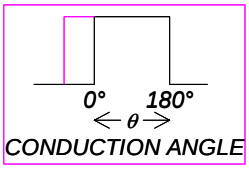


RECT 180°



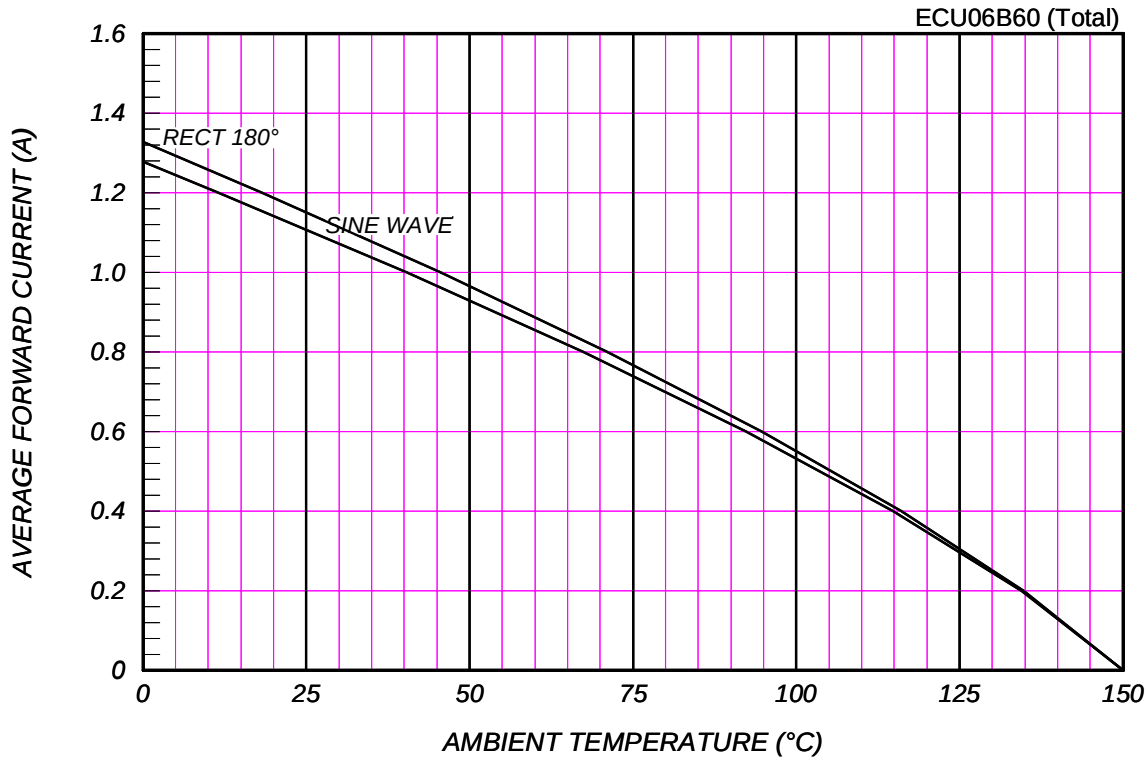
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE





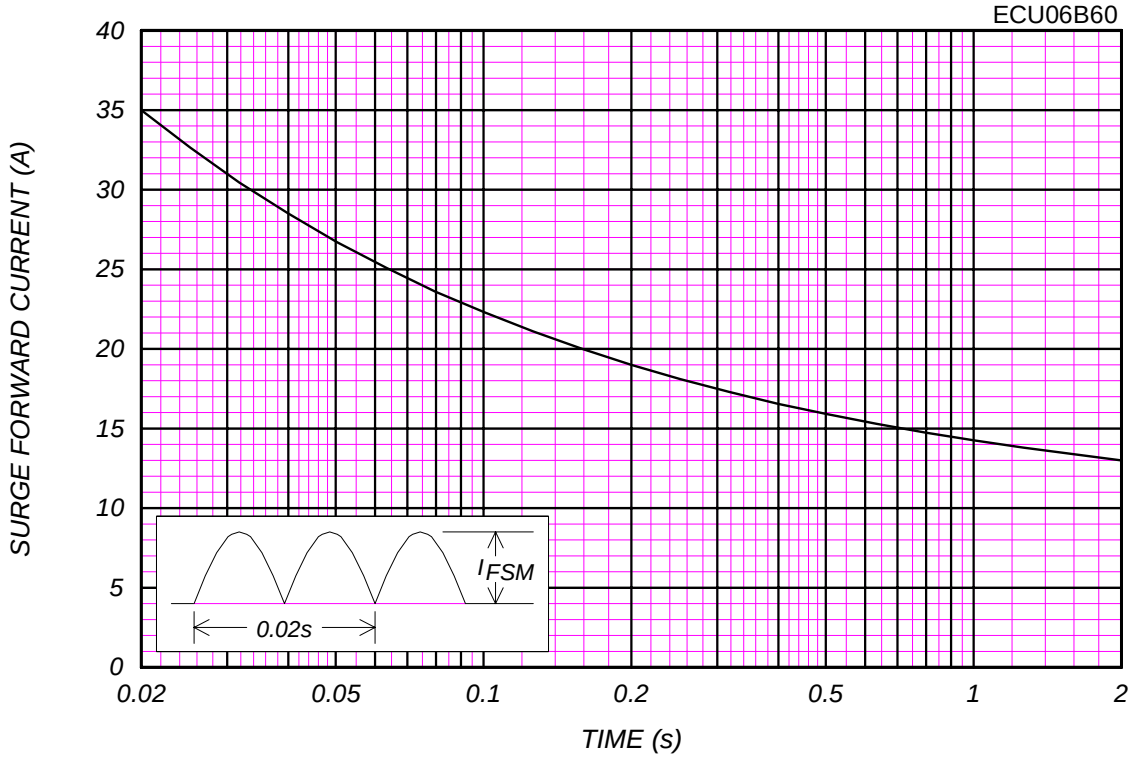
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted(Print land=20×20mm)



SURGE CURRENT RATINGS

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



RMS SURGE CURRENT RATINGS

Ta=40°C,Non-Repetitive,No Load