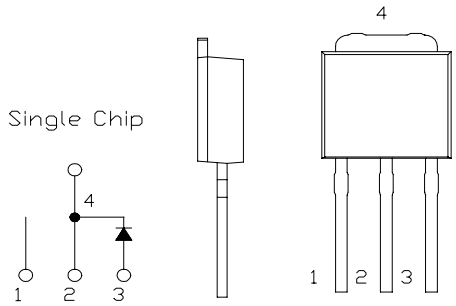
Nihon Inter Electronics Corporation

SBD Type : EA20QS04

OUTLINE DRAWING

FEATURES

* TO-251AA Case
* Low Forward Voltage drop
* Low Power Loss
* High Surge Capability
* 40 Volts thru 100 Volts Types Available



Maximum Ratings

Approx Net Weight:0.35g

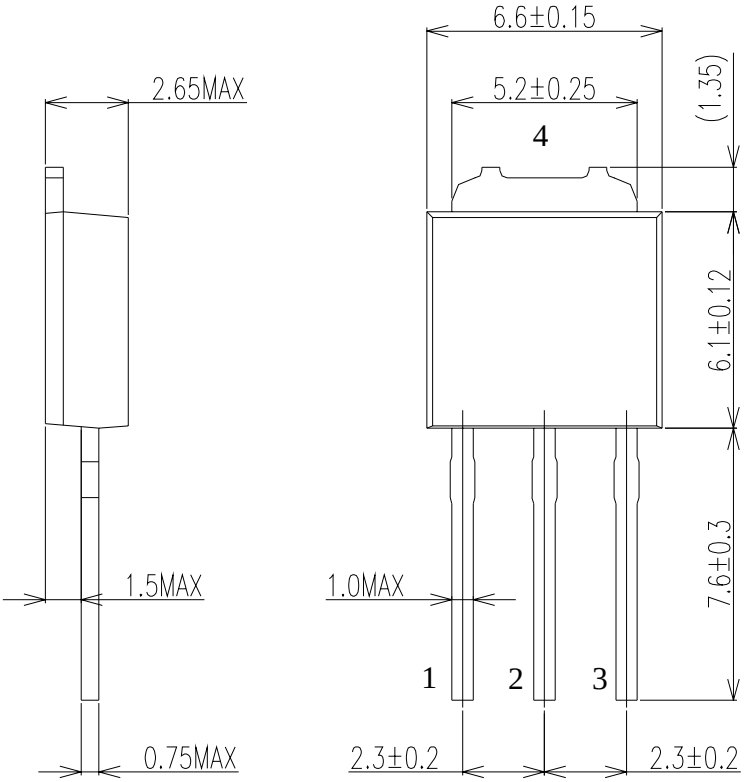
Rating		Symbol	EA20QS04			Unit
Repetitive Peak Reverse Voltage		V_{RRM}	40			V
Non-repetitive Peak Reverse Voltage		V_{RSM}	45			V
Average Rectified Output Current	P.C.Board mounted *	I_O	1.7	Ta=31°C	50Hz Half Sine Wave Resistive Load	A
	-		1.7	Tc=138°C		
RMS Forward Current		$I_{F(RMS)}$	2.67			A
Surge Forward Current		I_{FSM}	40	50Hz Half 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

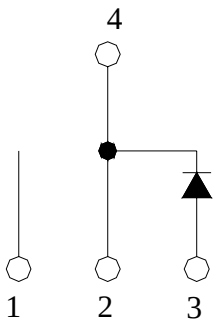
Characteristics		Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current		I_{RM}	Tj=25°C,V_{RM}=V_{RRM}	-	-	2.0	mA
Peak Forward Voltage		V_{FM}	Tj=25°C,I_{FM}= 2 A	-	-	0.55	V
Thermal Resistance	Junction to Ambient	Rth(j-a)	P.C.Board mounted *	-	-	80	°C/W
	Junction to Case	Rth(j-c)	-	-	-	7	°C/W

* Print Land = 20x20 mm

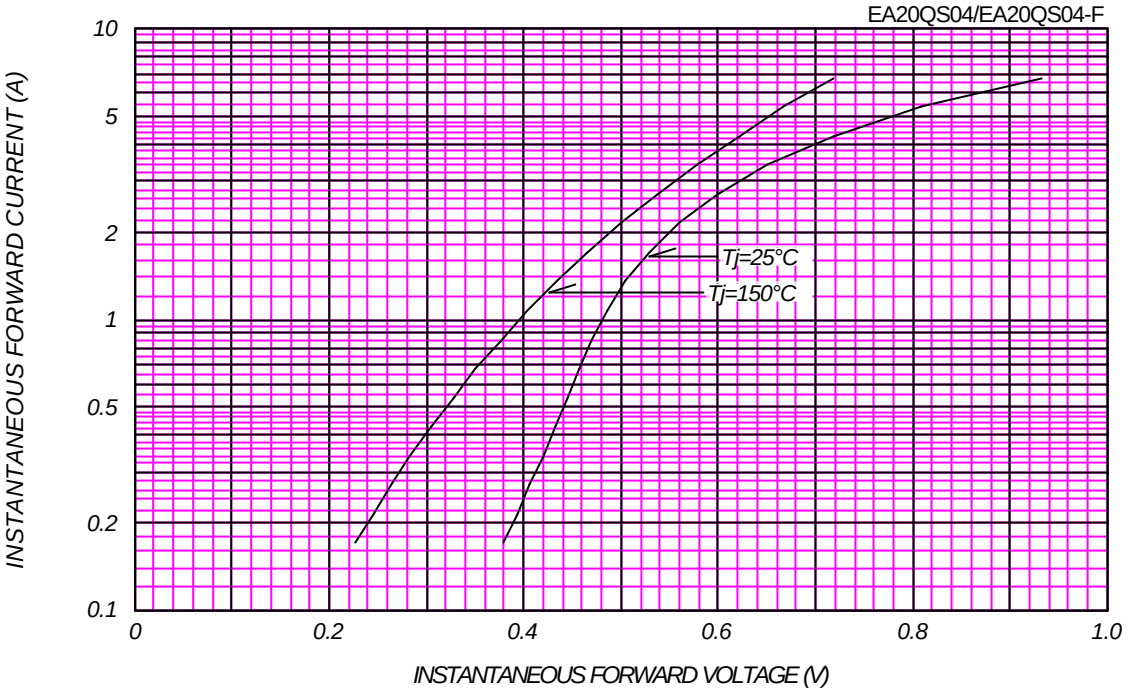
EA20QS04 OUTLINE DRAWING (Dimensions in mm)

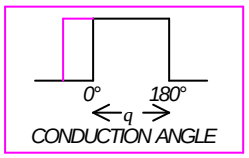


Single

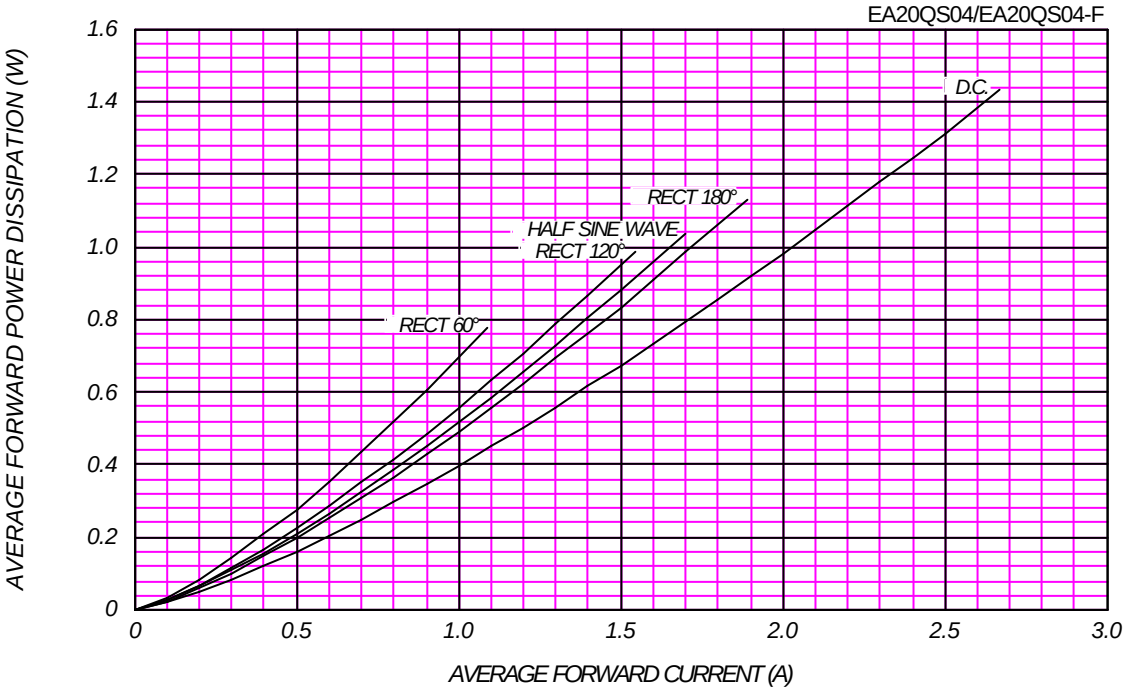


FORWARD CURRENT VS. VOLTAGE





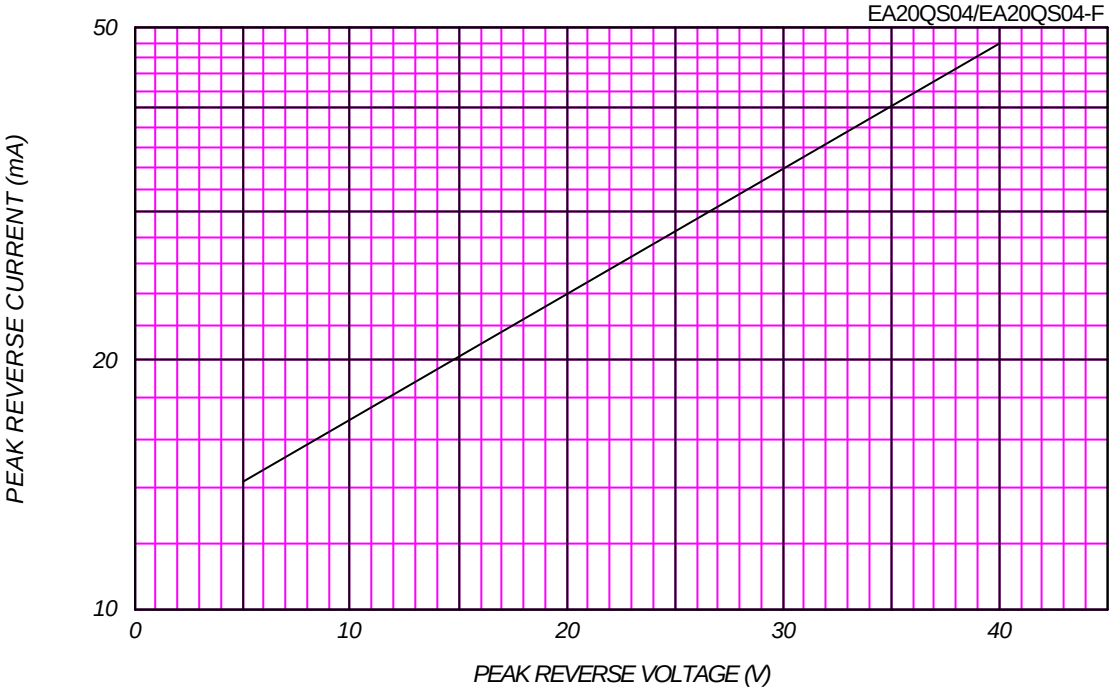
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

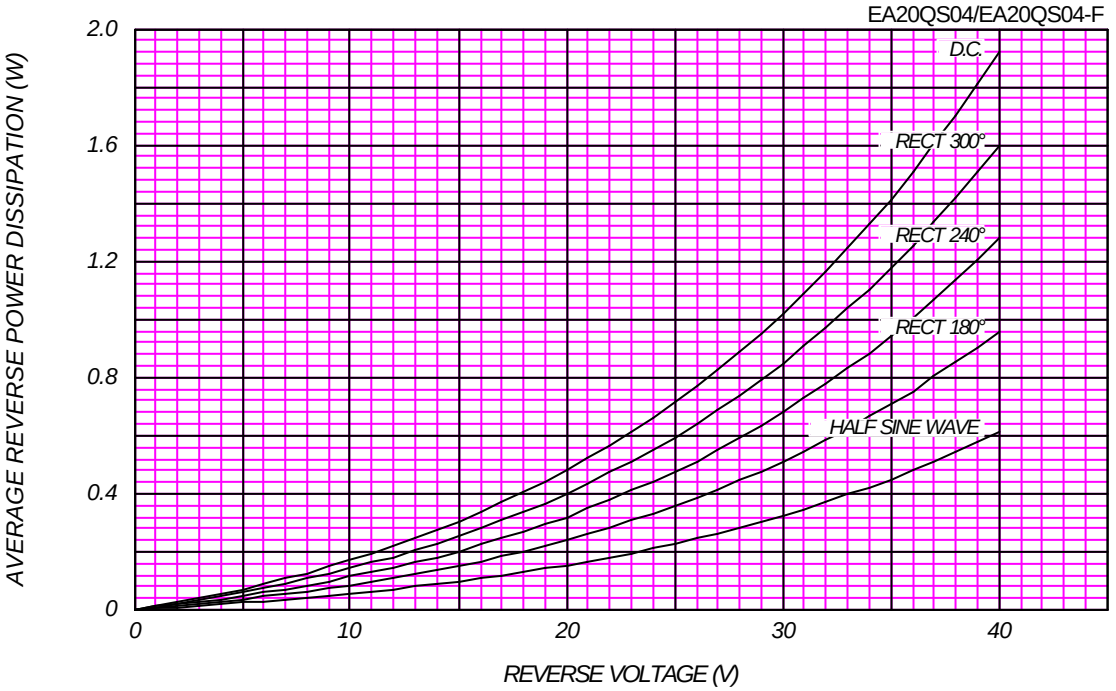
Tj= 150 °C

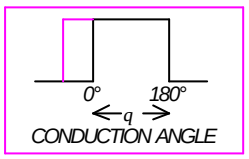
EA20QS04/EA20QS04-F



AVERAGE REVERSE POWER DISSIPATION

EA20QS04/EA20QS04-F

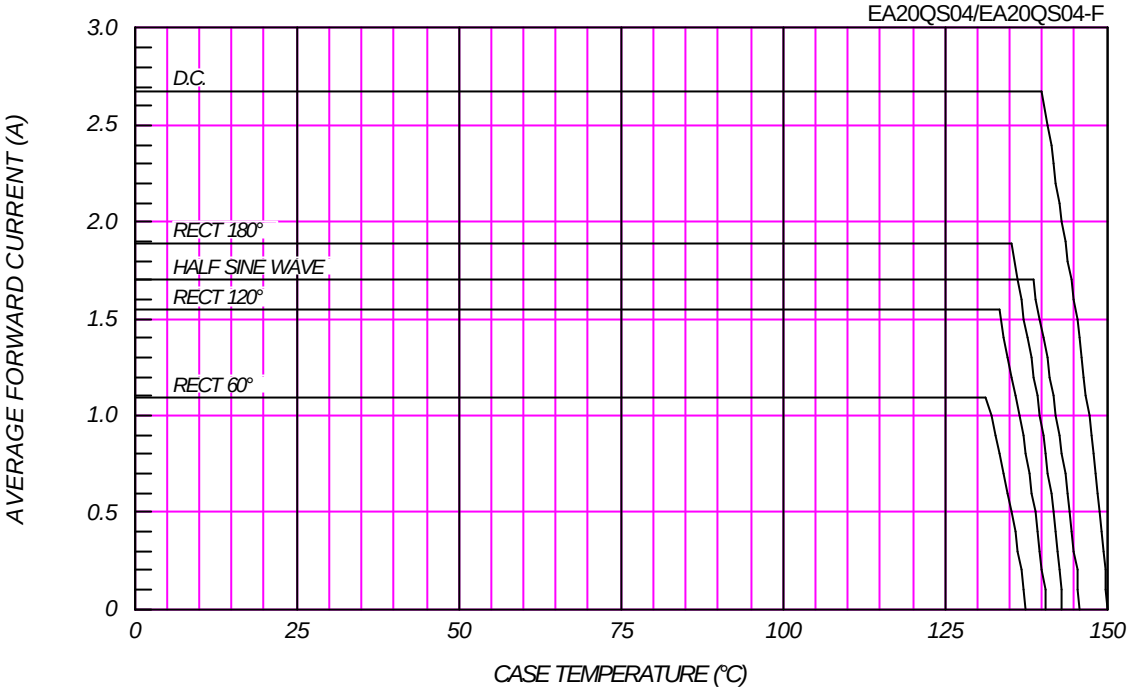


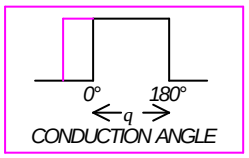


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

V_{RM}=40 V

EA20QS04/EA20QS04-F

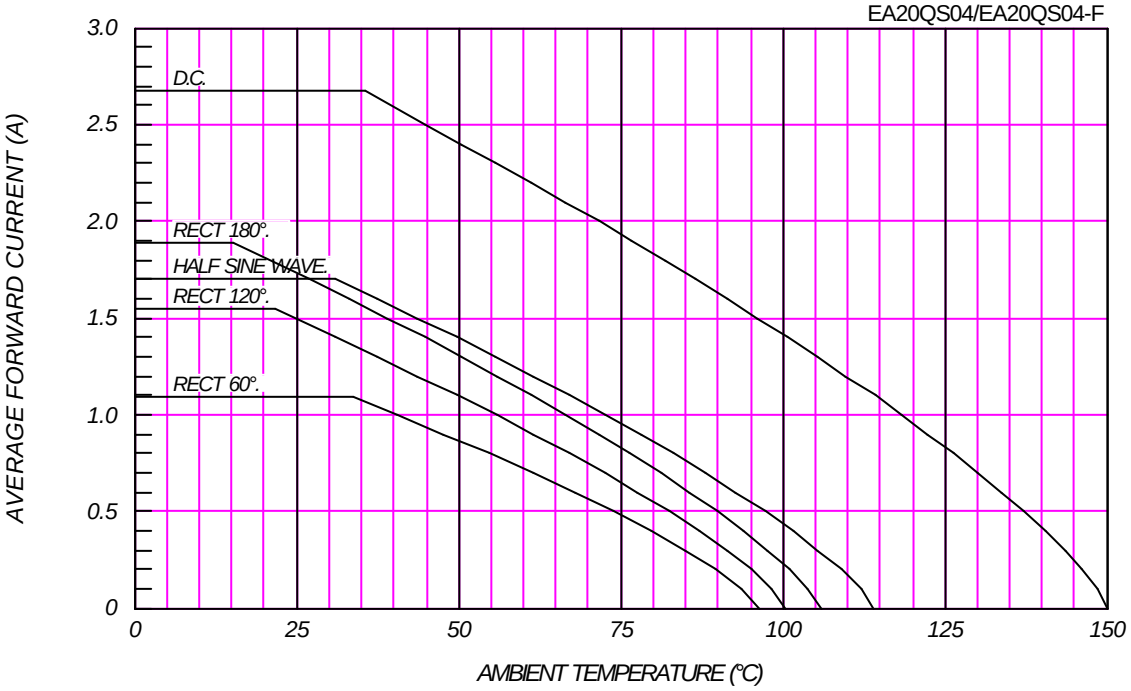




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

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

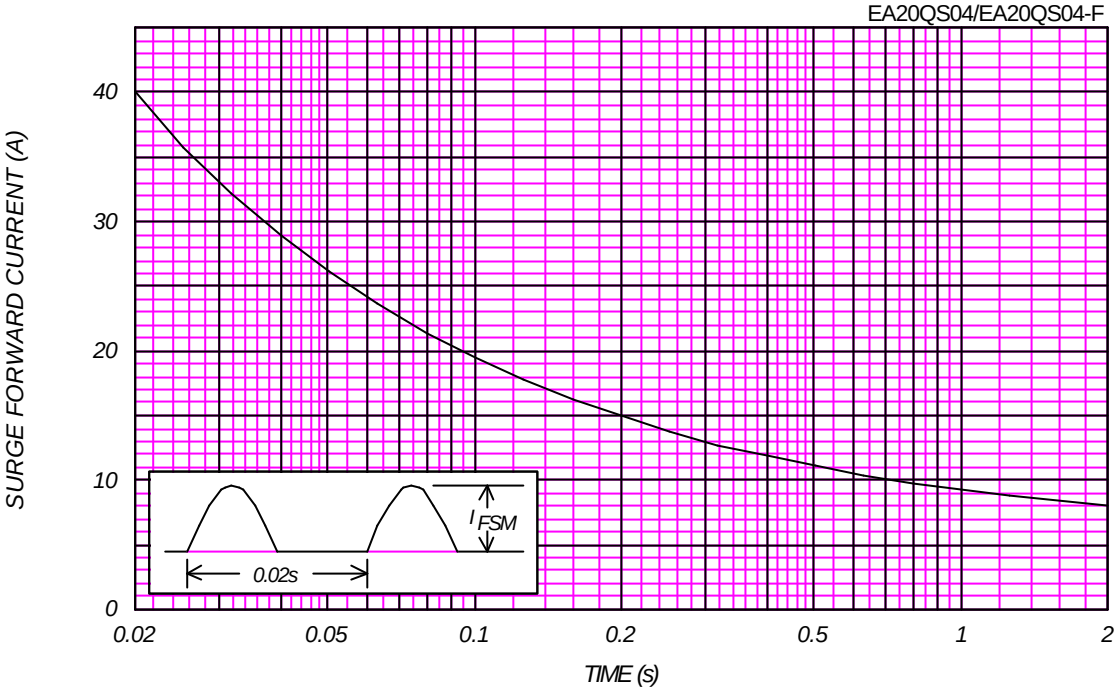
EA20QS04/EA20QS04-F



SURGE CURRENT RATINGS

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

EA20QS04/EA20QS04-F



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25° C,Vm=20mV$_{RMS}$,f=100kHz,Typical Value

EA20QS04/EA20QS04-F