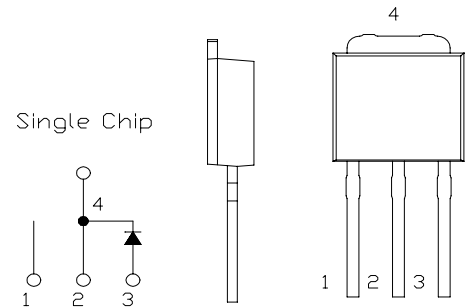


FRD Type : EA31FS6

OUTLINE DRAWING

FEATURES

- * TO-251AA Case
- * Ultra – Fast Recovery
- * Low Forward Voltage drop
- * Low Power Loss
- * High Surge Capability
- * 200 Volts thru 600 Volts Types Available



Maximum Ratings

Approx Net Weight:0.35g

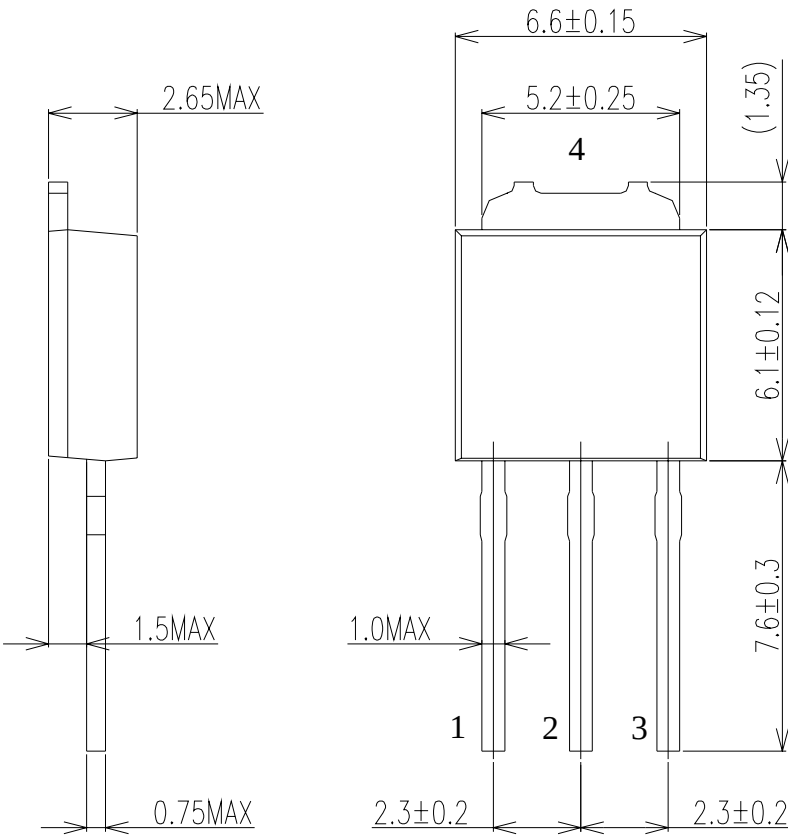
Rating		Symbol	EA31FS6			Unit
Repetitive Peak Reverse Voltage		V _{RRM}	600			V
Average Rectified Output Current	P.C.Board mounted *	I _O	1.2	Ta=29°C	50Hz Half Sine Wave Resistive Load	A
	-		3.0	Tc=119°C		
RMS Forward Current		I _{F(RMS)}	4.71			A
Surge Forward Current		I _{FSM}	45	50Hz Half Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range		T _{jw}	- 40 to + 150			°C
Storage Temperature Range		T _{stg}	- 40 to + 150			°C

Electrical • Thermal Characteristics

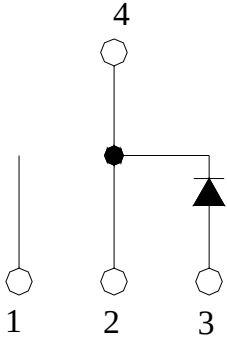
Characteristics		Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current		I_{RM}	$T_j=25^{\circ}\text{C}, V_{RM}=V_{RRM}$ per Arm	-	-	20	μA
Peak Forward Voltage		V_{FM}	$T_j=25^{\circ}\text{C}, I_{FM}= 3 \text{ A}$ per Arm	-	-	1.7	V
Reverse Recovery Time		t_{rr}	$I_{FM}= 3 \text{ A},$ $-di/dt= 50 \text{ A}/\mu\text{s}, T_a= 25^{\circ}\text{C}$	-	-	35	ns
Thermal Resistance	Junction to Ambient	$R_{th(j-a)}$	P.C.Board mounted *	-	-	80	$^{\circ}\text{C}/\text{W}$
	Junction to Case	$R_{th(j-c)}$	-	-	-	6	$^{\circ}\text{C}/\text{W}$

* Print Land = 20x20 mm

EA31FS6 OUTLINE DRAWING (Dimensions in mm)



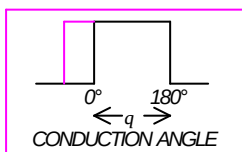
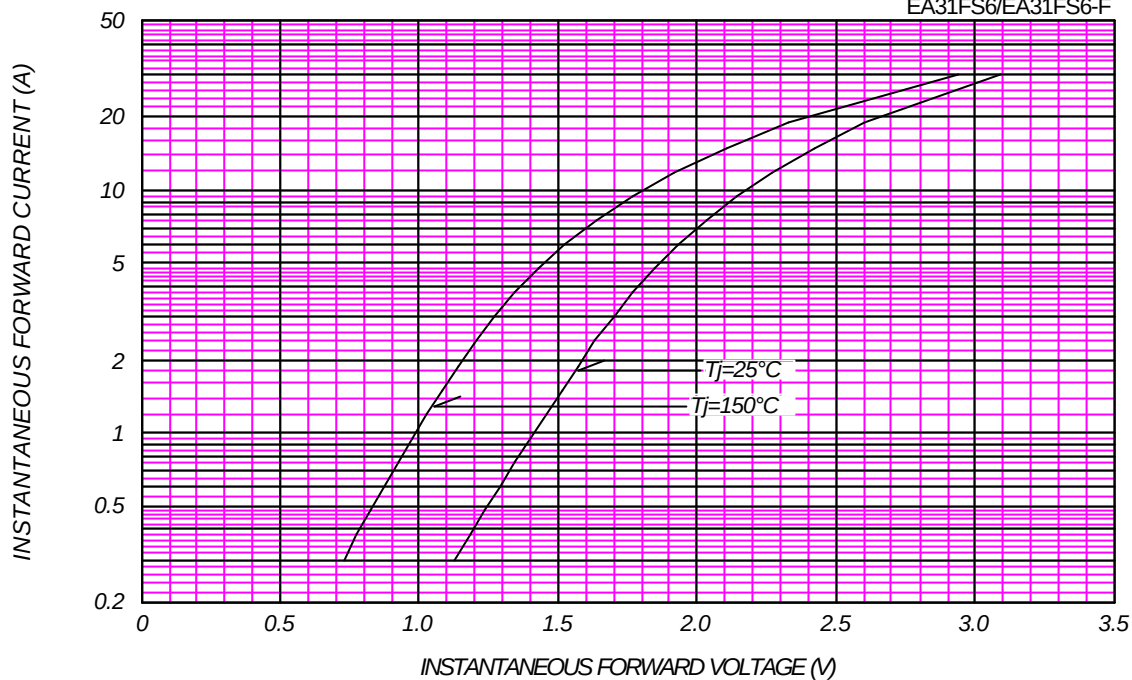
Single



FORWARD CURRENT VS. VOLTAGE

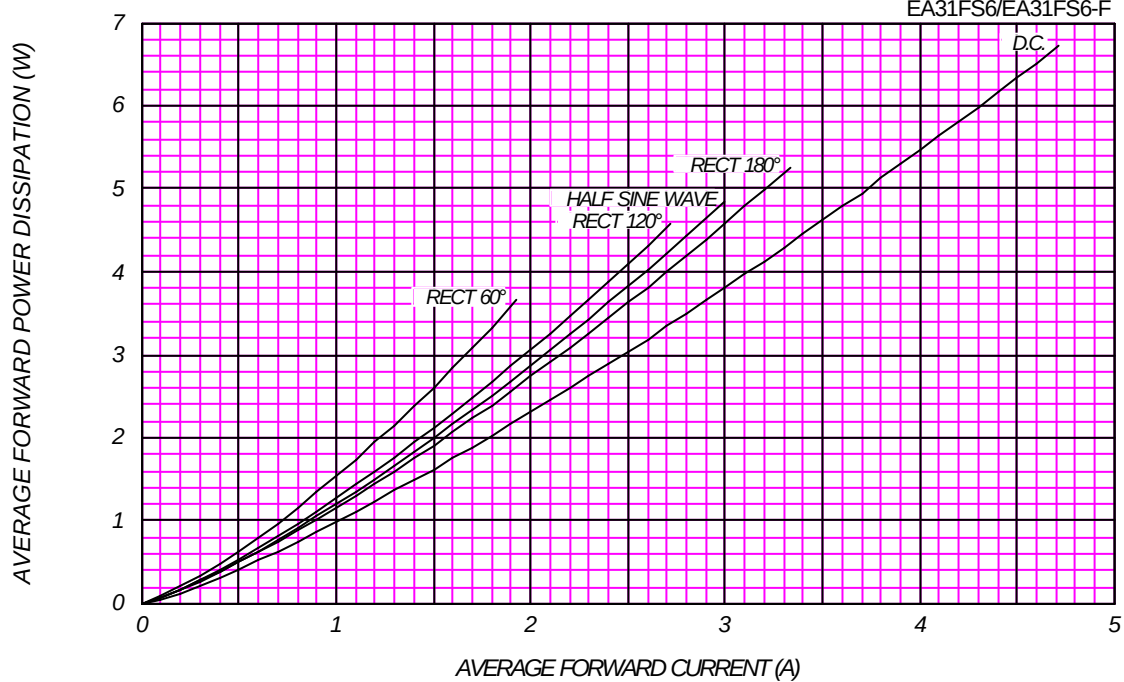
10ms Sine Wave Single Pulse

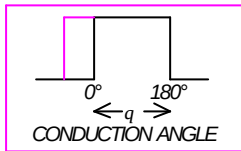
EA31FS6/EA31FS6-F



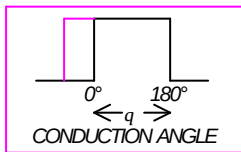
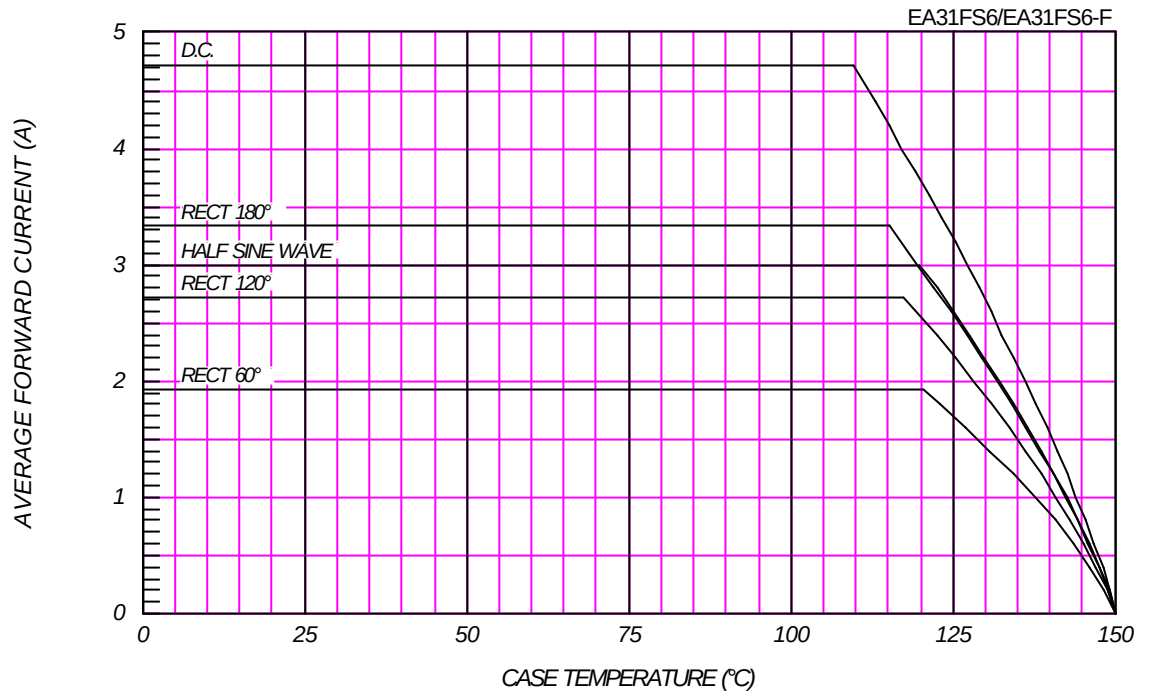
AVERAGE FORWARD POWER DISSIPATION

EA31FS6/EA31FS6-F



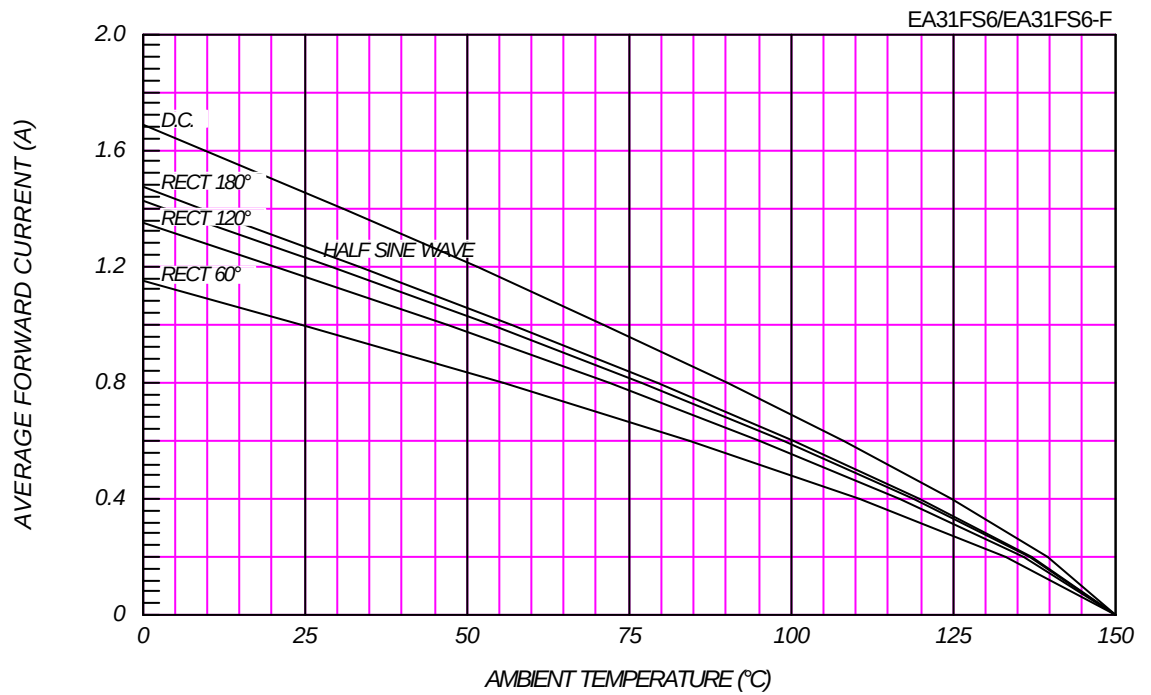


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted Print land=20×20mm



SURGE CURRENT RATINGS

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

EA31FS6/EA31FS6-F

