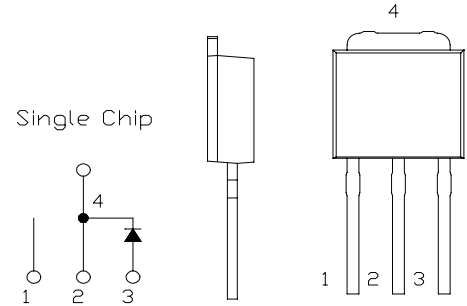


FRD Type : EA31FS6

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

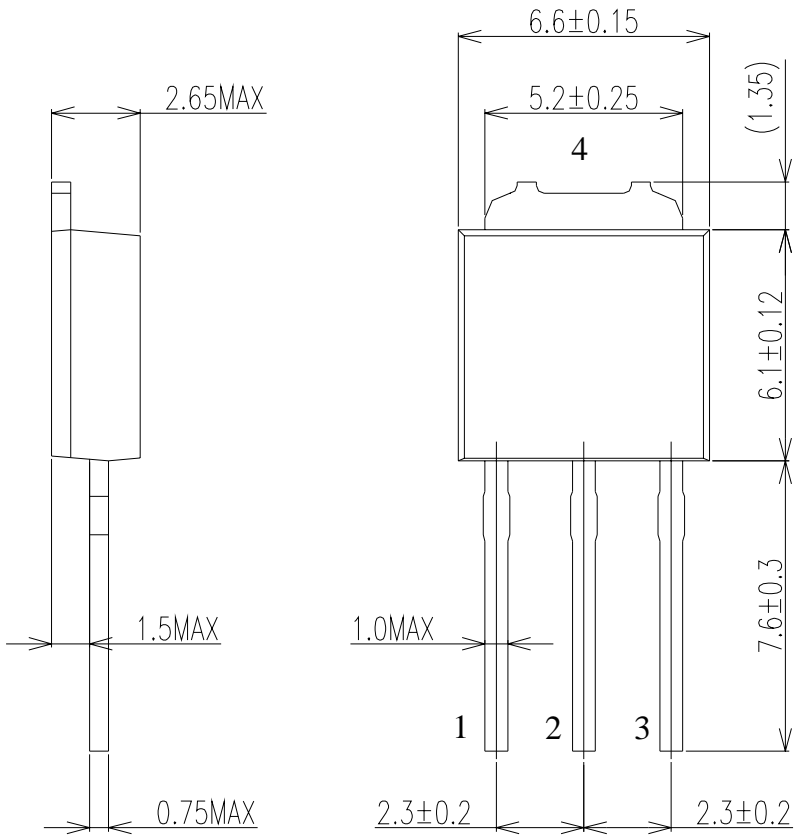
Rating	Symbol	EA31FS6			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600			V
Average Rectified Output Current	I_O	1.2	$T_a=29^{\circ}C$	50Hz Half Sine Wave Resistive Load	A
		3.0	$T_c=119^{\circ}C$		
RMS Forward Current	$I_{F(RMS)}$	4.71			A
Surge Forward Current	I_{FSM}	45	50Hz Half Sine Wave, 1cycle, Non-repetitive		A
Operating Junction Temperature Range	T_{jw}	- 40 to + 150			$^{\circ}C$
Storage Temperature Range	T_{stg}	- 40 to + 150			$^{\circ}C$

Electrical • Thermal Characteristics

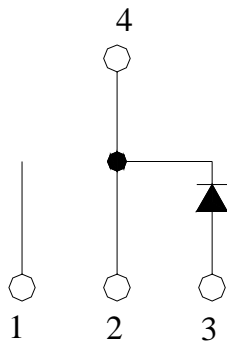
Characteristics	Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Arm	-	-	20	μA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C, I_{FM}= 3 A$ per Arm	-	-	1.7	V
Reverse Recovery Time	t_{rr}	$I_{FM}= 3 A,$ $-di/dt= 50 A/\mu s, T_a= 25^{\circ}C$	-	-	35	ns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

* Print Land = 20x20 mm

EA31FS6 OUTLINE DRAWING (Dimensions in mm)



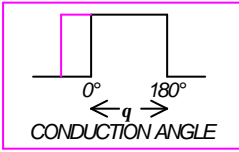
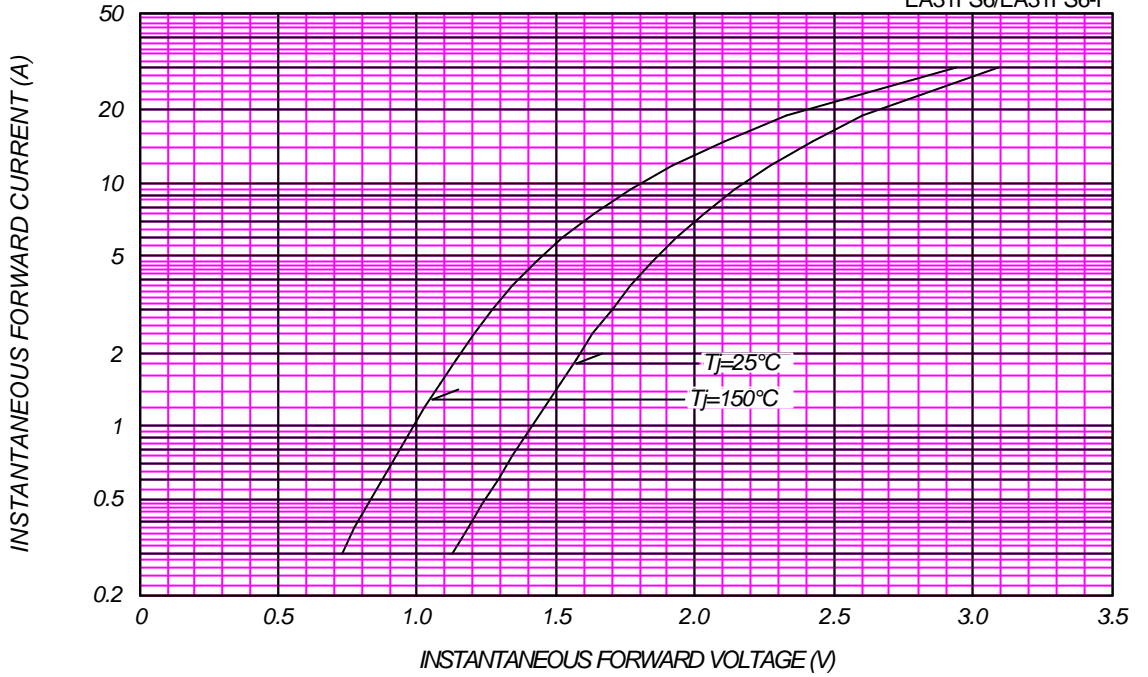
Single



FORWARD CURRENT VS. VOLTAGE

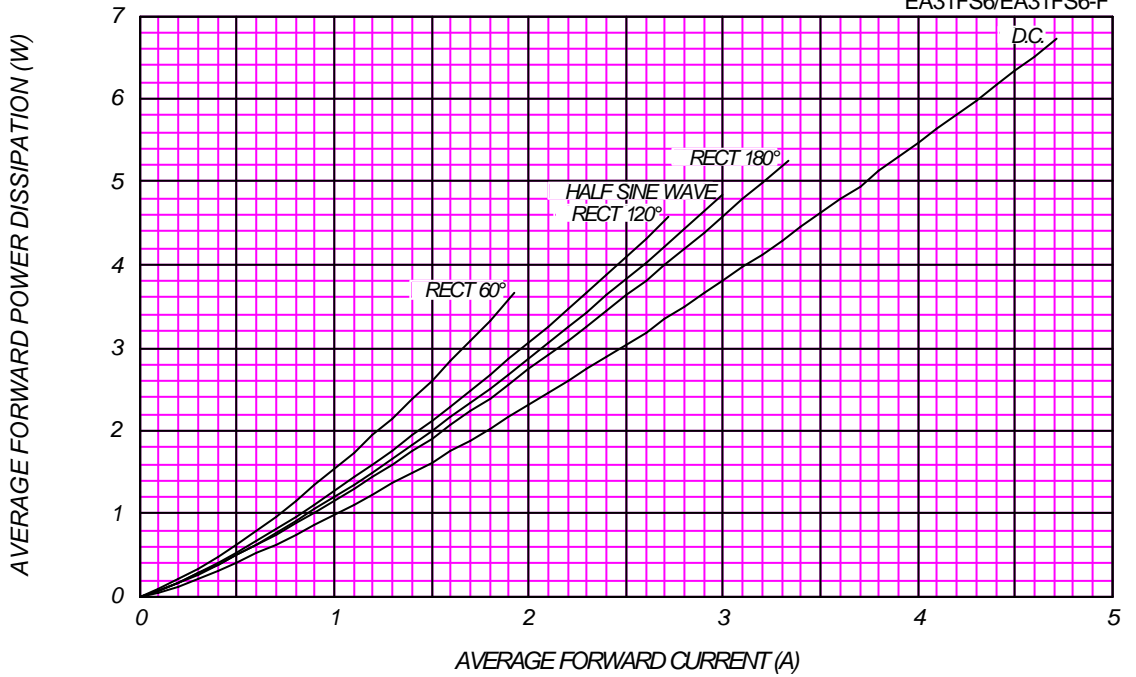
10ms Sine Wave Single Pulse

EA31FS6/EA31FS6-F



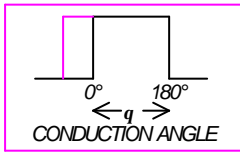
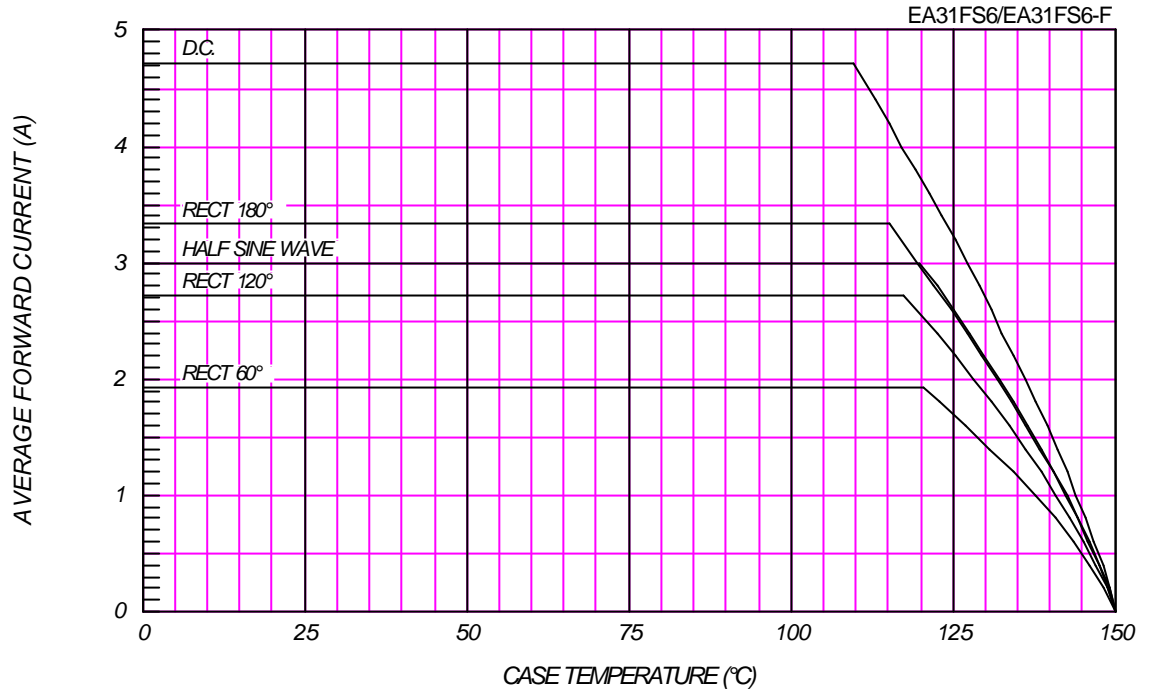
AVERAGE FORWARD POWER DISSIPATION

EA31FS6/EA31FS6-F



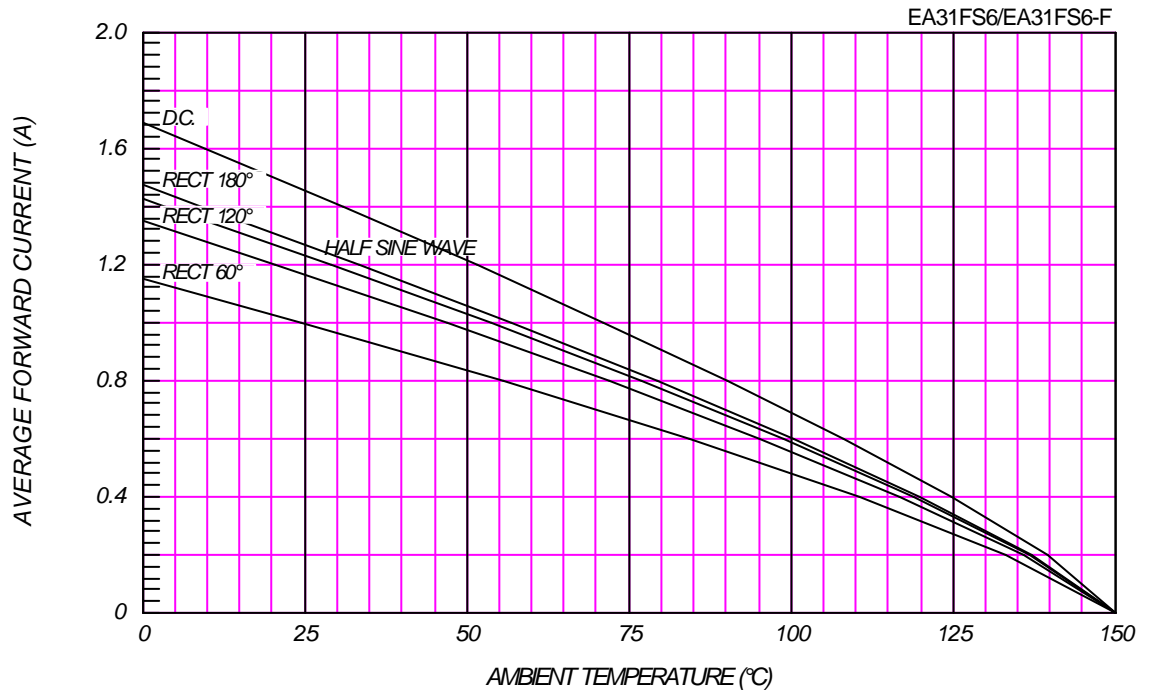


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted Print land=20x20mm



SURGE CURRENT RATINGS

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

EA31FS6/EA31FS6-F

