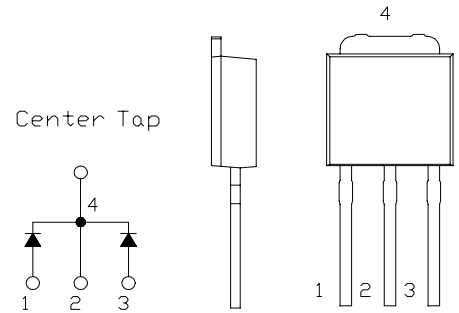


# SBD Type : ECL06B03

## OUTLINE DRAWING

### FEATURES

- \* TO-251AA Case
- \* Dual Diodes Cathode Common
- \* Extremely Low Forward Voltage drop
- \* Low Power Loss,High Efficiency
- \* High Surge Capability



### Maximum Ratings

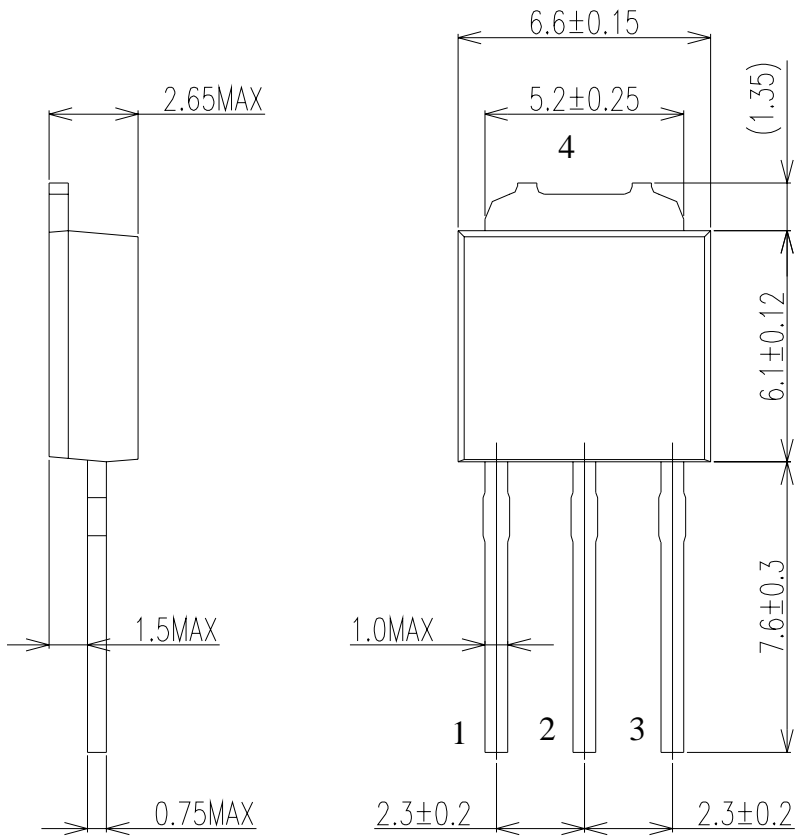
Approx Net Weight:0.35g

Rating	Symbol	ECL06B03		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30		V
Average Rectified Output Current	$I_O$	6.0	$T_c=70^{\circ}C$ 50Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	6.66		A
Surge Forward Current	$I_{FSM}$	45	50Hz Full Sine Wave,1cycle, Non-repetitive	A
Operating JunctionTemperature Range	$T_{jw}$	- 40 to + 100		$^{\circ}C$
Storage Temperature Range	$T_{stg}$	- 40 to + 125		$^{\circ}C$

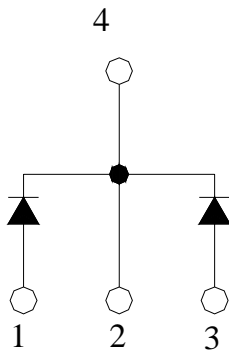
### Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Arm	-	-	3.0	mA
Peak Forward Voltage	$V_{FM}$	$T_j=25^{\circ}C, I_{FM}= 3 A$ per Arm	-	-	0.47	V
Thermal Resistance	Junction to Case	$R_{th(j-c)}$	-	-	5	$^{\circ}C/W$

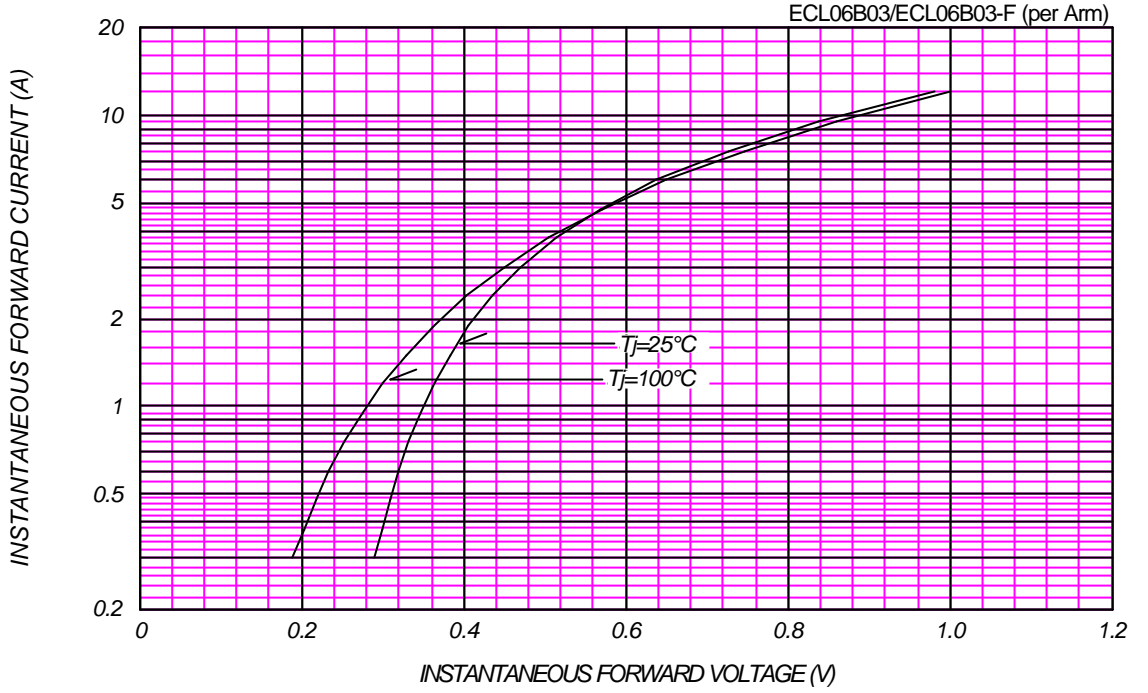
ECL06B03 OUTLINE DRAWING (Dimensions in mm)



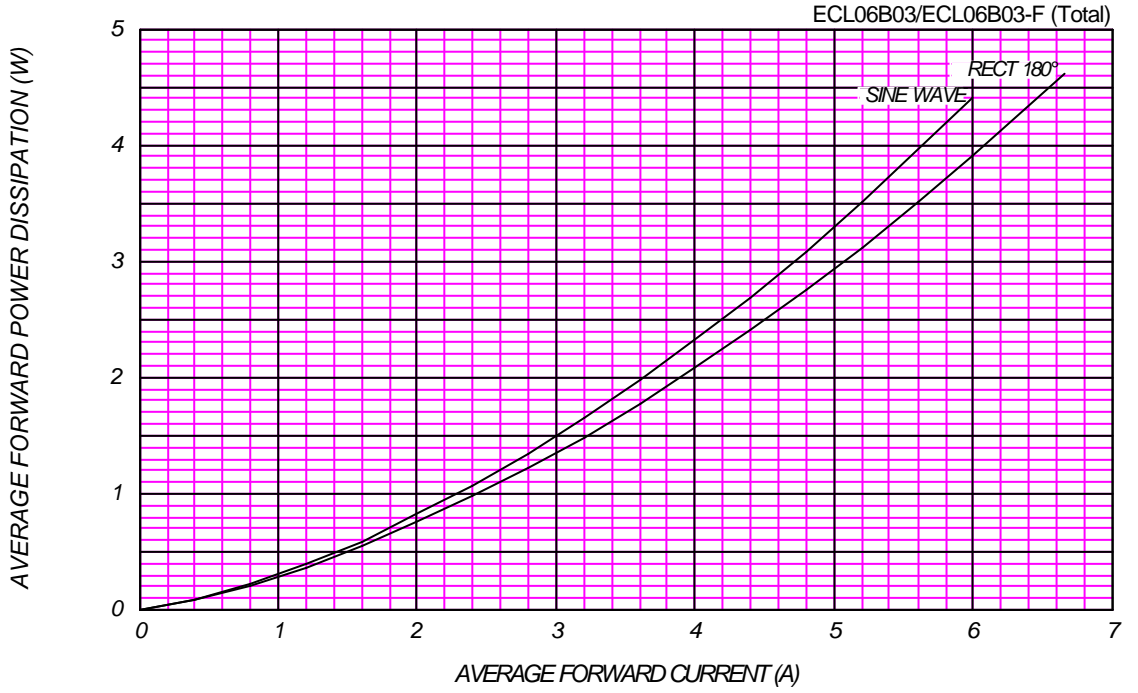
Center Tap



FORWARD CURRENT VS. VOLTAGE



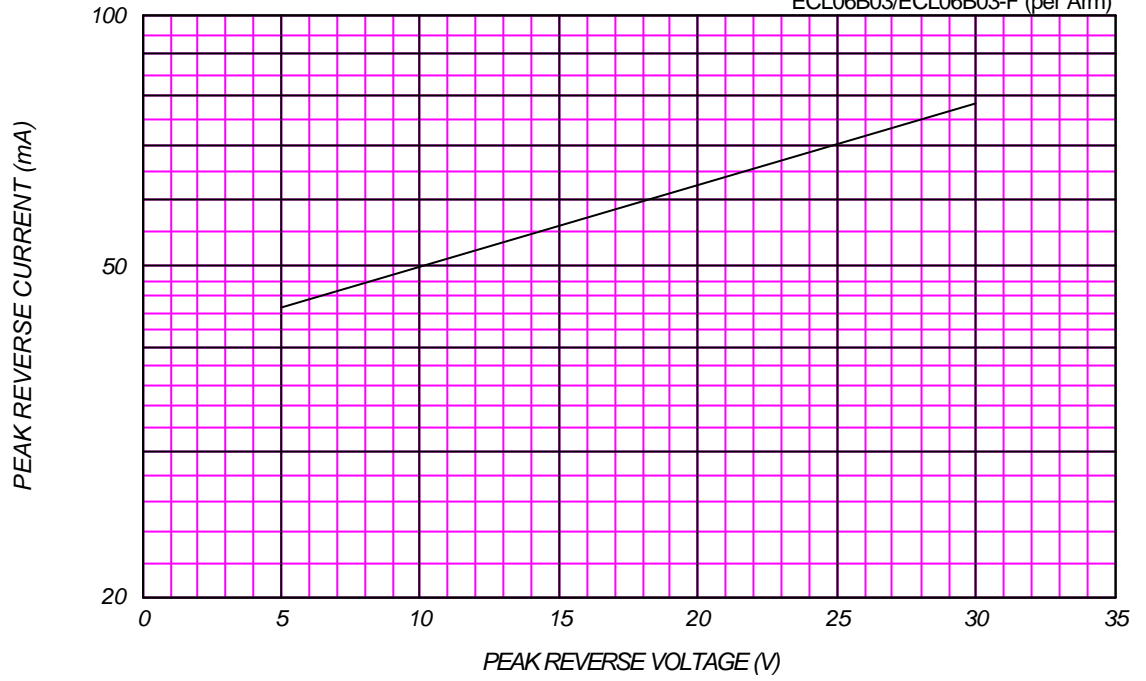
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

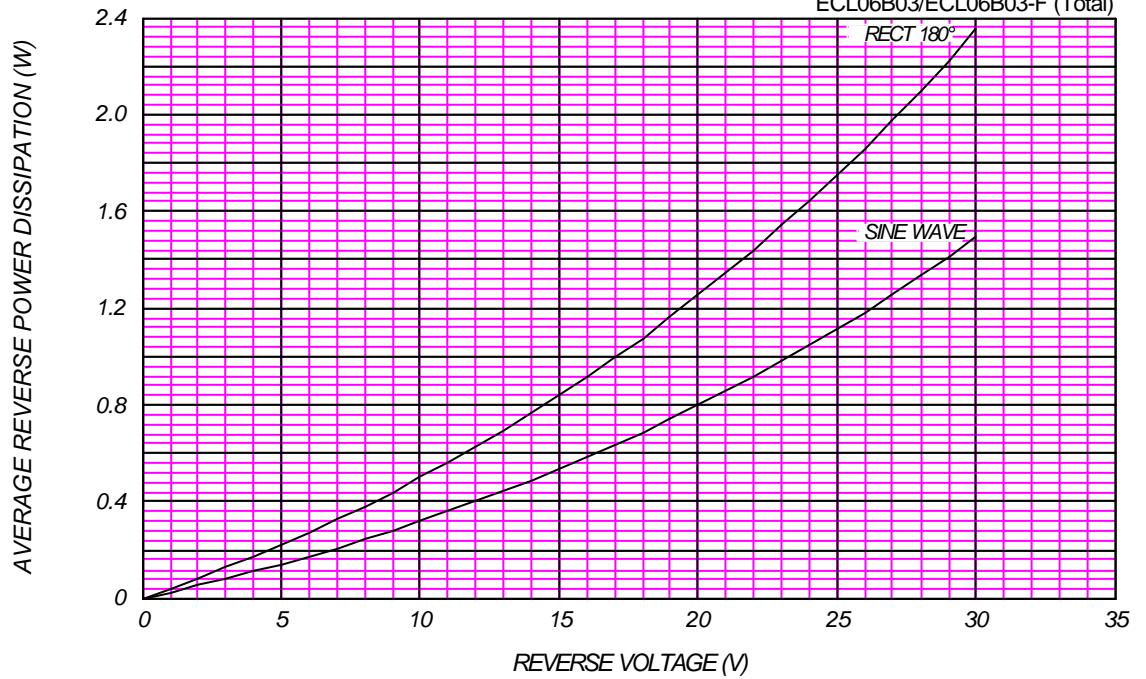
$T_j = 100\text{ }^\circ\text{C}$

ECL06B03/ECL06B03-F (per Arm)



AVERAGE REVERSE POWER DISSIPATION

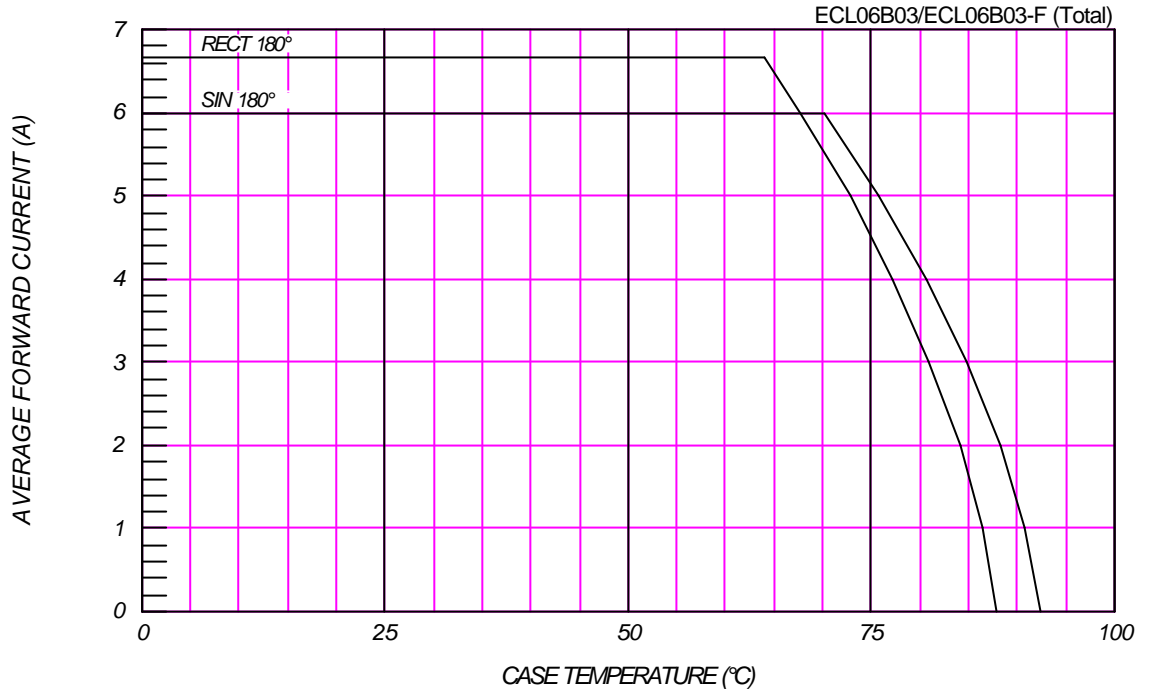
ECL06B03/ECL06B03-F (Total)





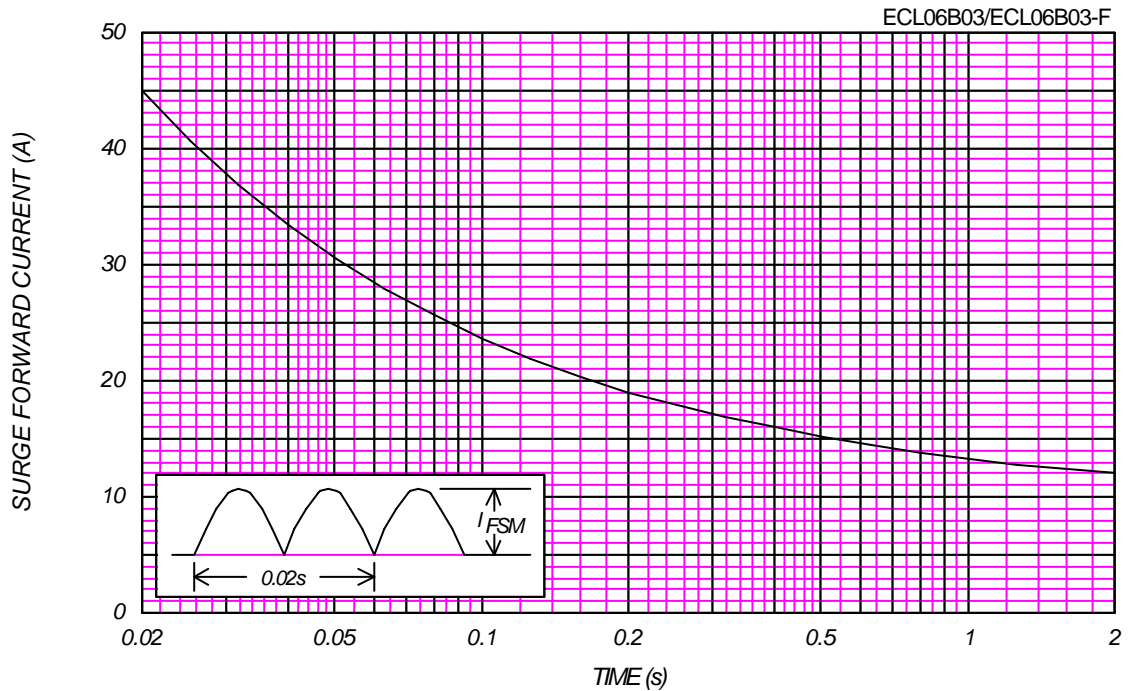
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30$



### SURGE CURRENT RATINGS

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



### JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^\circ\text{C}$ ,  $V_m=20\text{mV}_{\text{RMS}}$ ,  $f=100\text{kHz}$ , Typical Value

ECL06B03/ECL06B03-F (per Arm)

