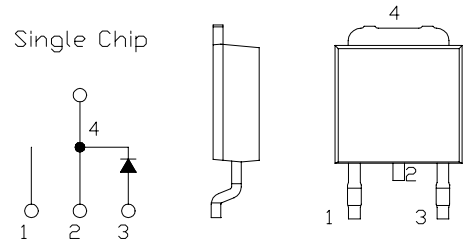


# SBD Type : ESL03B03-F

## OUTLINE DRAWING

### FEATURES

- \* TO-252AA Case, Surface Mounting Device
- \* Extremely Low Forward Voltage drop
- \* Low Power Loss
- \* High Surge Capability
- \* Packaged in 16mm Tape and Reel



### Maximum Ratings

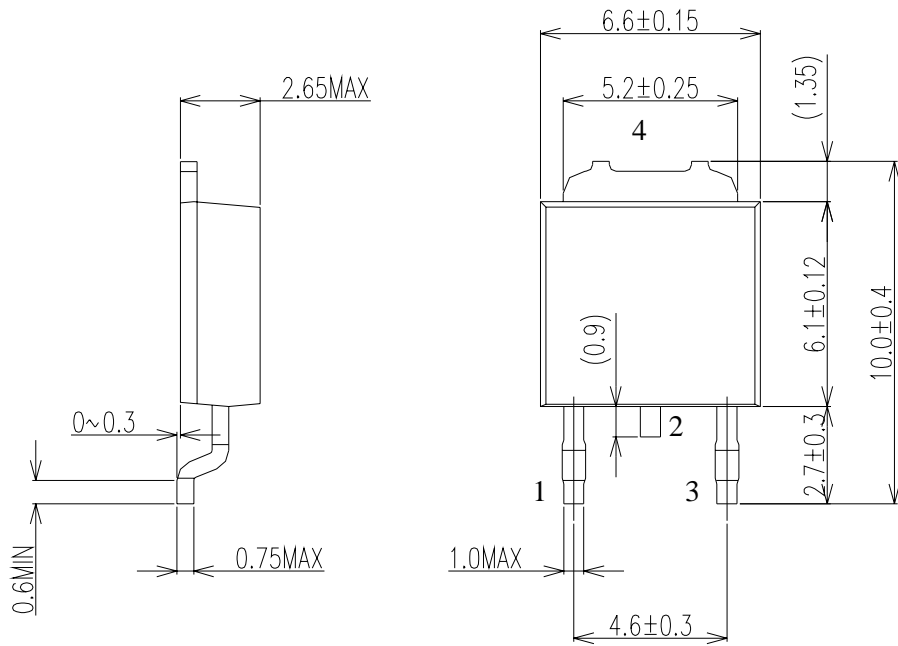
Approx Net Weight:0.30g

Rating	Symbol	ESL03B03-F			Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30			V
Average Rectified Output Current	$I_O$	3.0	$T_c=82^\circ\text{C}$	50Hz Half Sine Wave Resistive Load	A
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 + 100			$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 40 to + 125			$^\circ\text{C}$

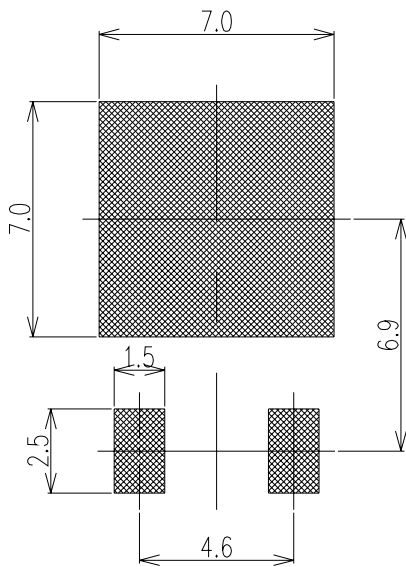
### Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^\circ\text{C}, V_{RM}=V_{RRM}$	-	-	3.0	mA
Peak Forward Voltage	$V_{FM}$	$T_j=25^\circ\text{C}, I_{FM}= 3 \text{ A}$	-	-	0.47	V
Thermal Resistance Junction to Case	$R_{th(j-c)}$	-	-	-	6	$^\circ\text{C/W}$

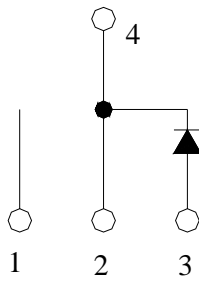
ESL03B03-F OUTLINE DRAWING (Dimensions in mm)



Soldering PAD



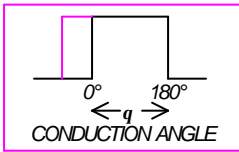
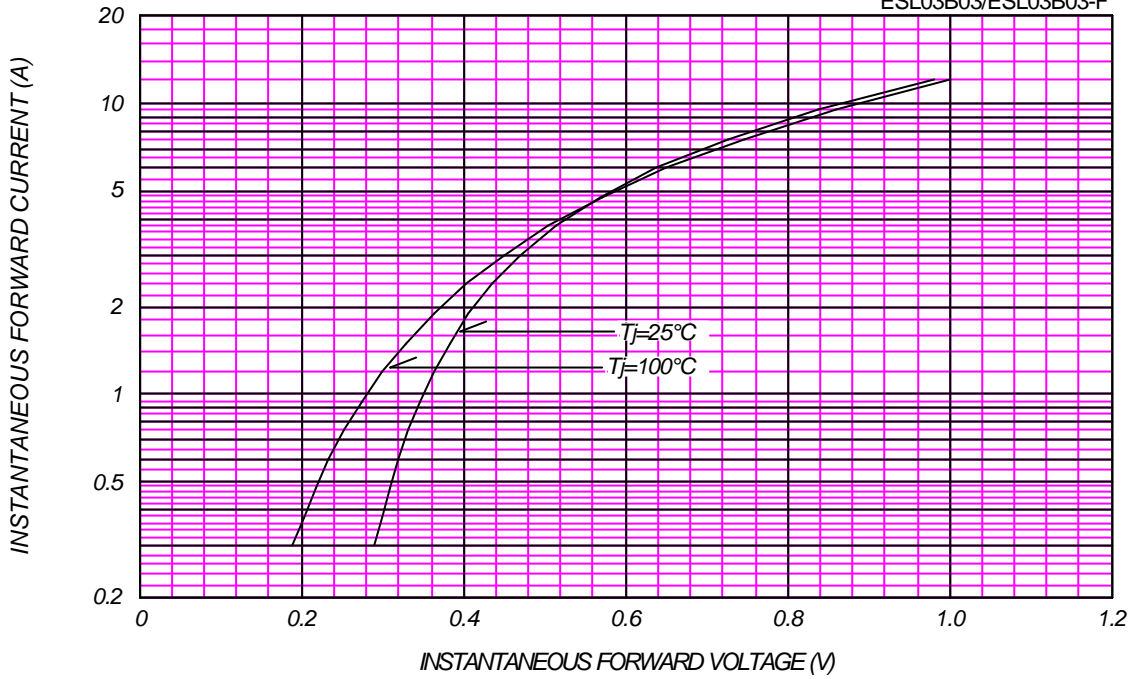
Single



### FORWARD CURRENT VS. VOLTAGE

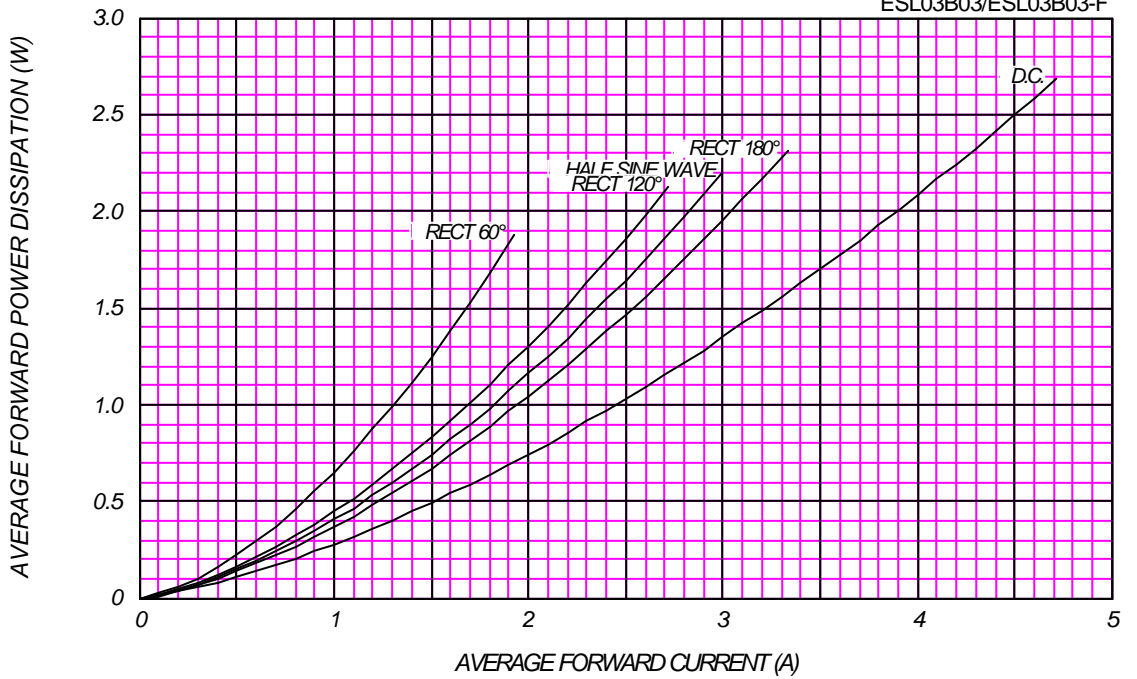
10ms Sine Wave Single Pulse

ESL03B03/ESL03B03-F



### AVERAGE FORWARD POWER DISSIPATION

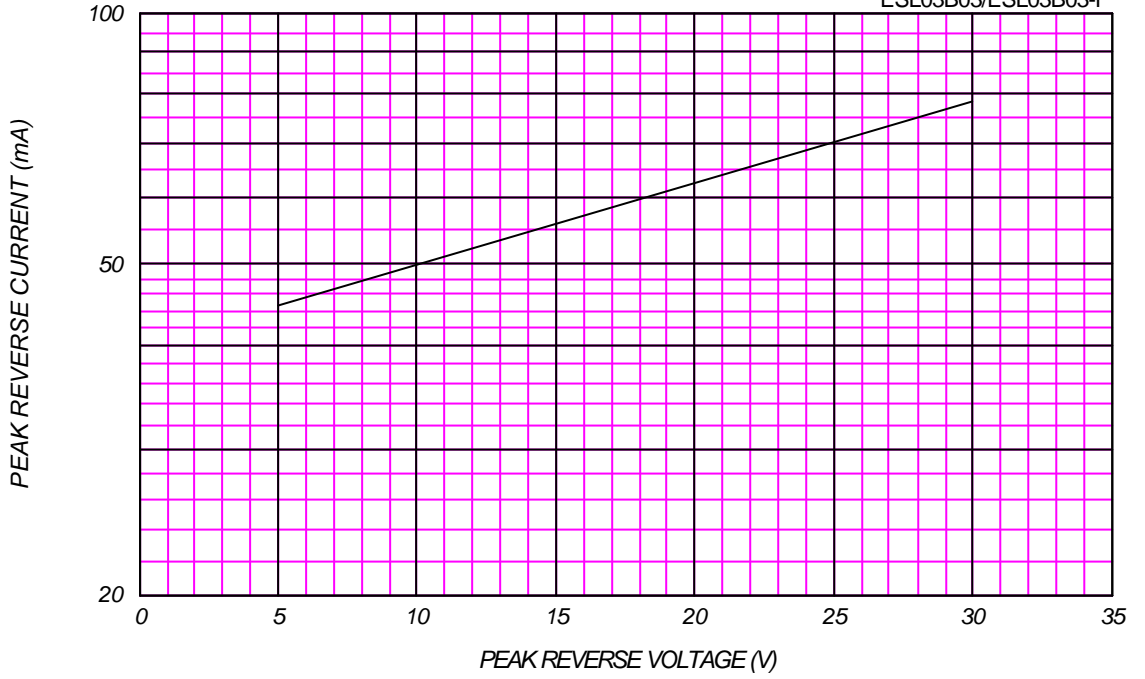
ESL03B03/ESL03B03-F



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

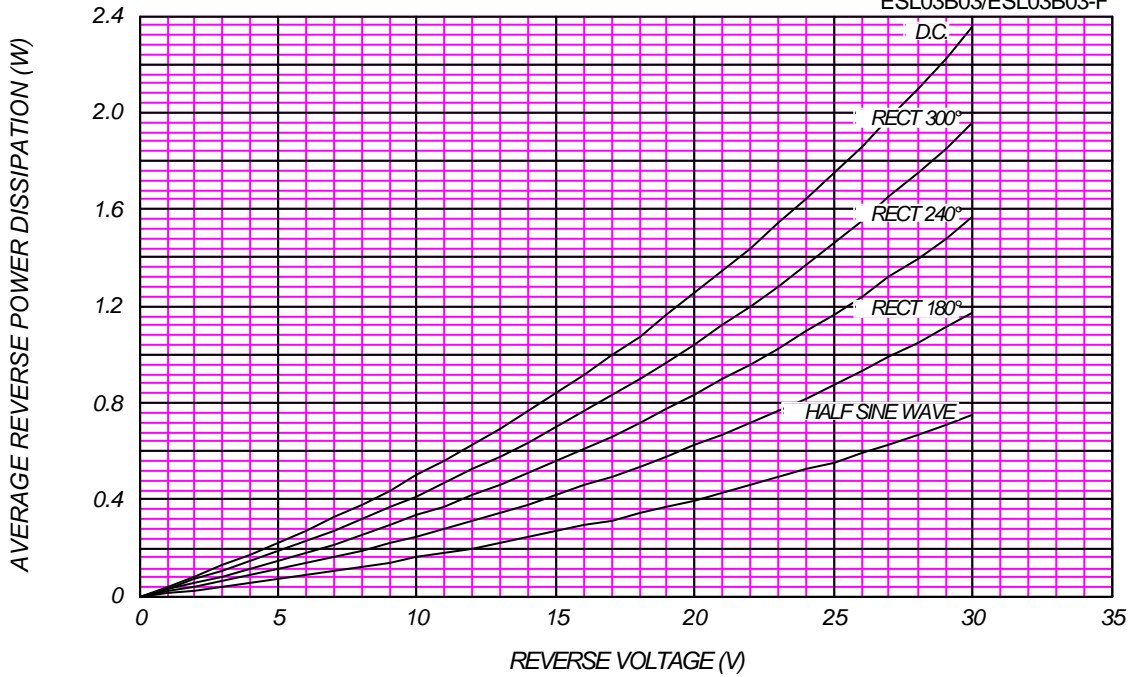
T<sub>j</sub> = 100 °C

ESL03B03/ESL03B03-F



AVERAGE REVERSE POWER DISSIPATION

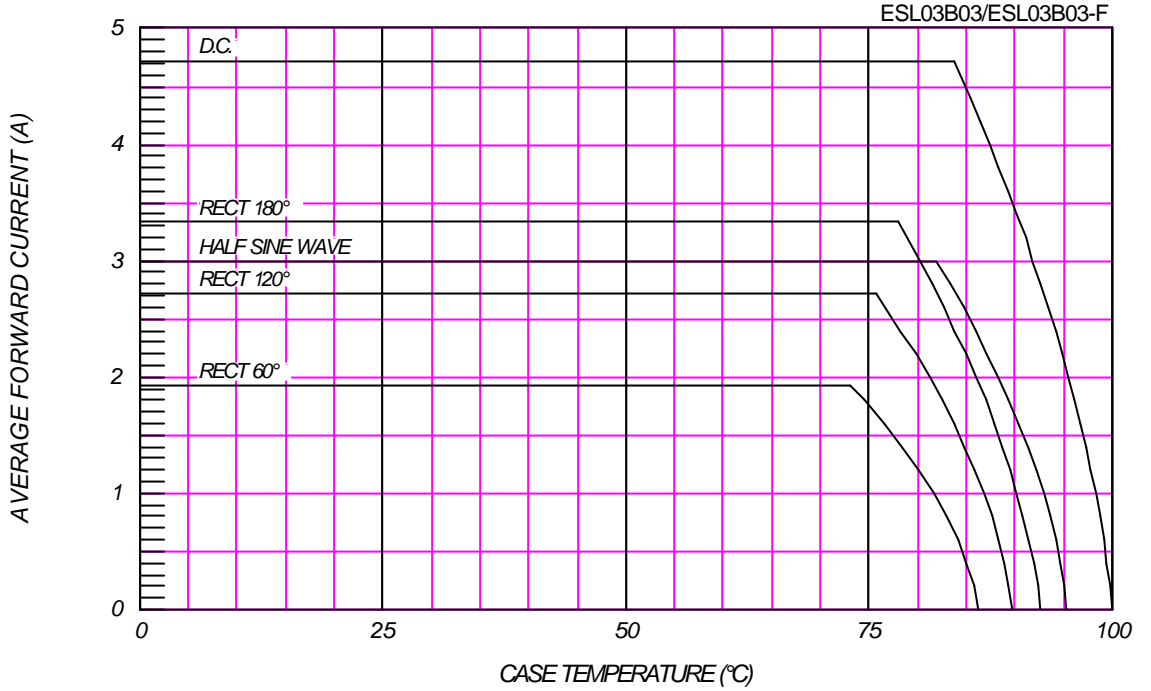
ESL03B03/ESL03B03-F





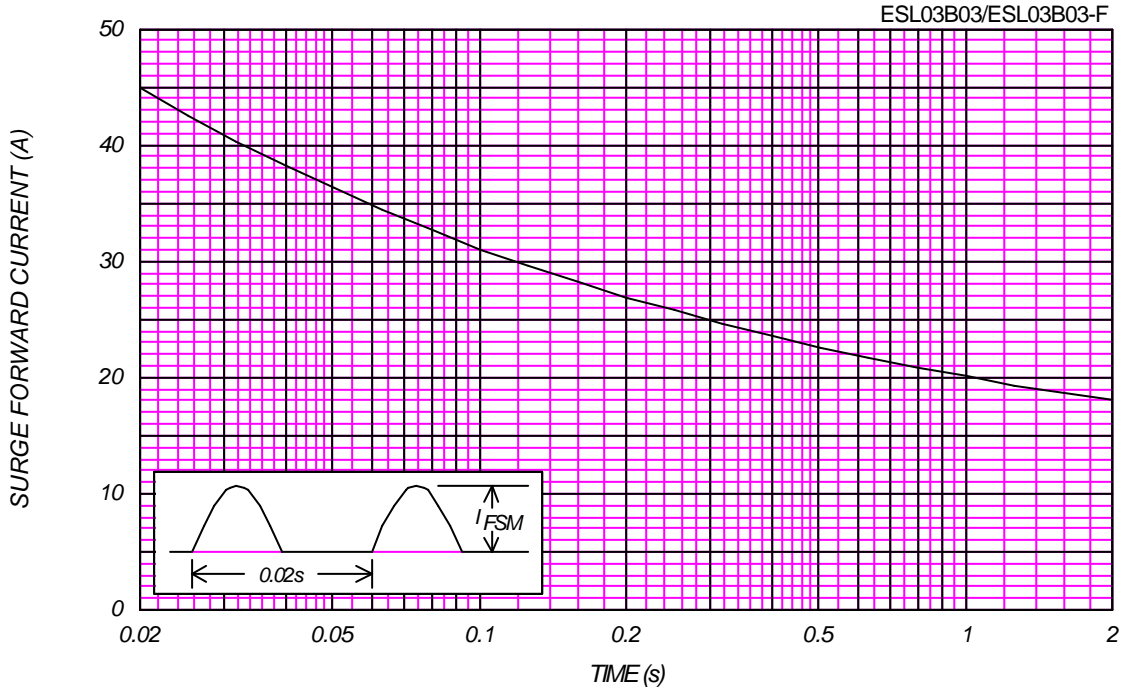
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$



### 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

ESL03B03/ESL03B03-F

