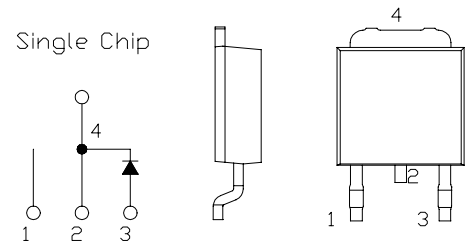


SBD Type : ESL03B03-F

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

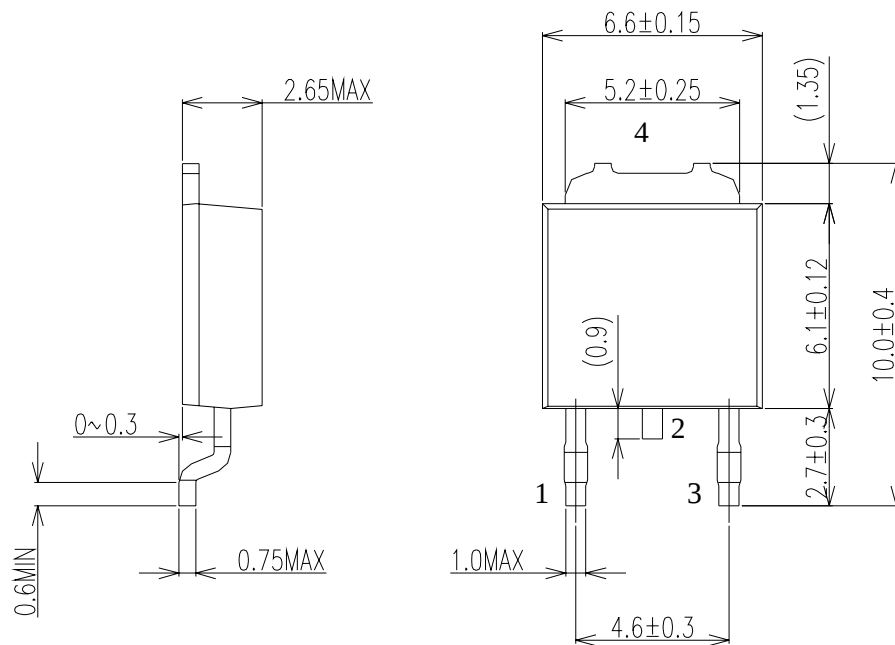
Approx Net Weight:0.30g

Rating	Symbol	ESL03B03-F			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	30			V
Average Rectified Output Current	I _O	3.0	Tc=82°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 JunctionTemperature Range	T _{jw}	- 40 to + 100			°C
Storage Temperature Range	T _{stg}	- 40 to + 125			°C

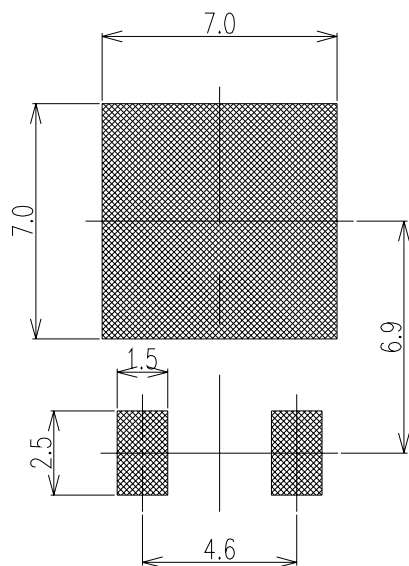
Electrical • Thermal Characteristics

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	$^{\circ}\text{C/W}$

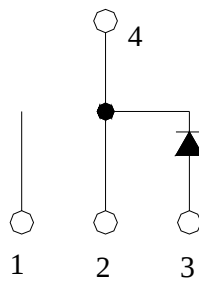
ESL03B03-F OUTLINE DRAWING (Dimensions in mm)



Soldering PAD



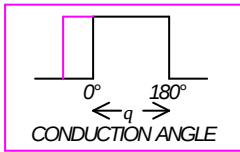
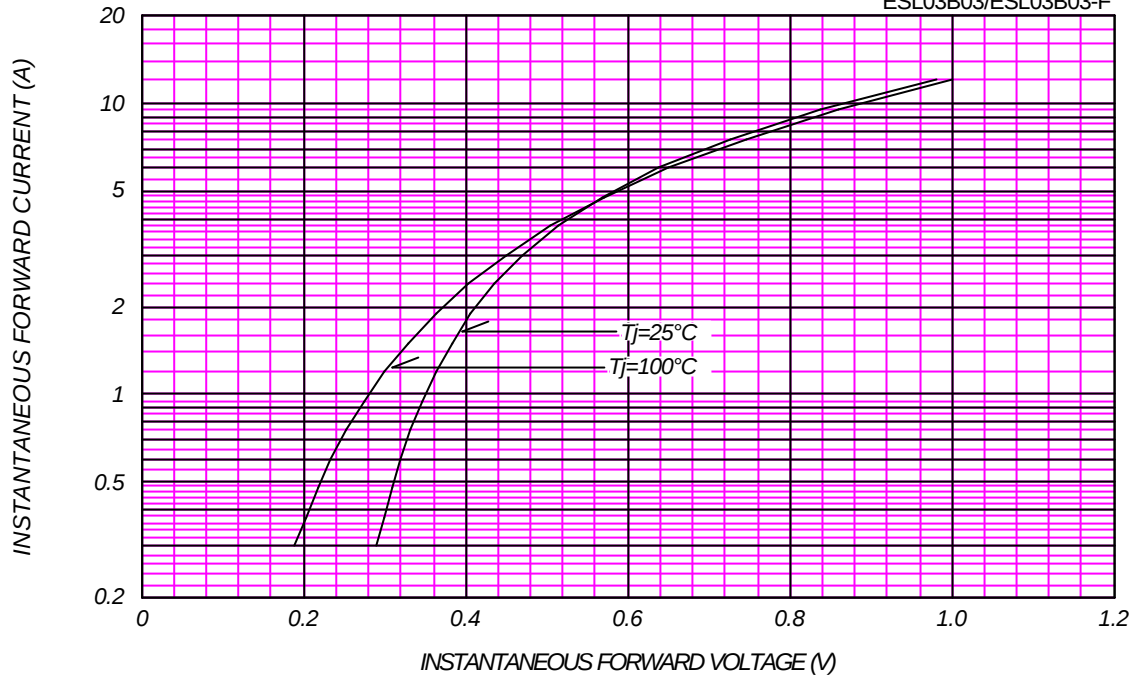
Single



FORWARD CURRENT VS. VOLTAGE

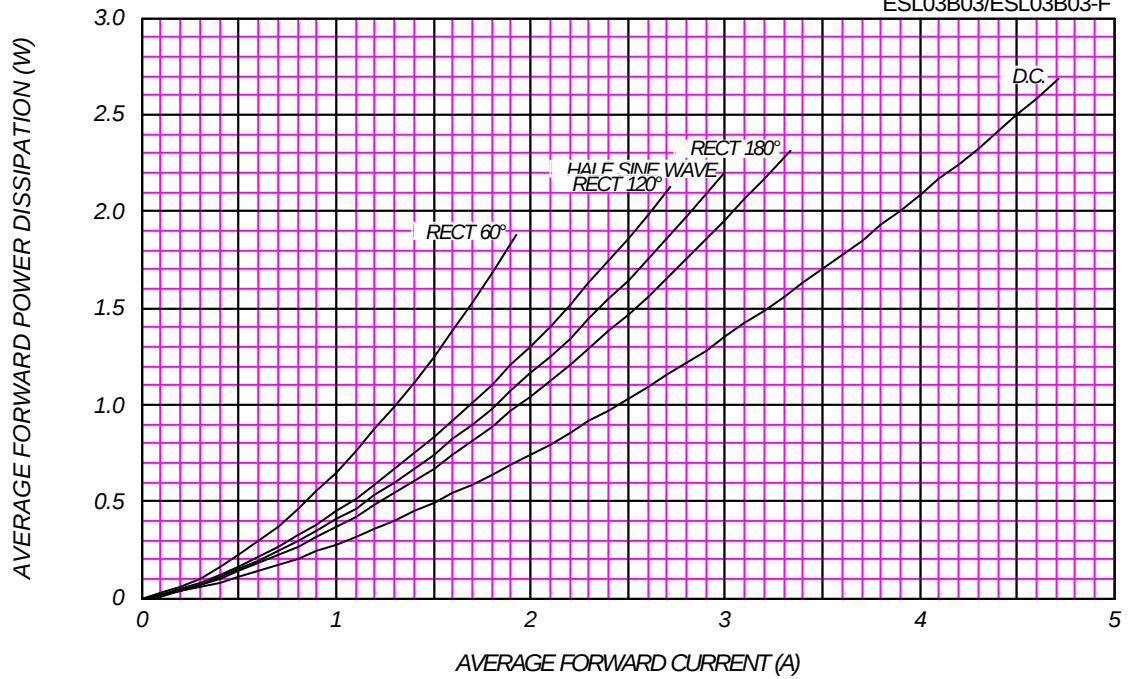
10ms Sine Wave Single Pulse

ESL03B03/ESL03B03-F



AVERAGE FORWARD POWER DISSIPATION

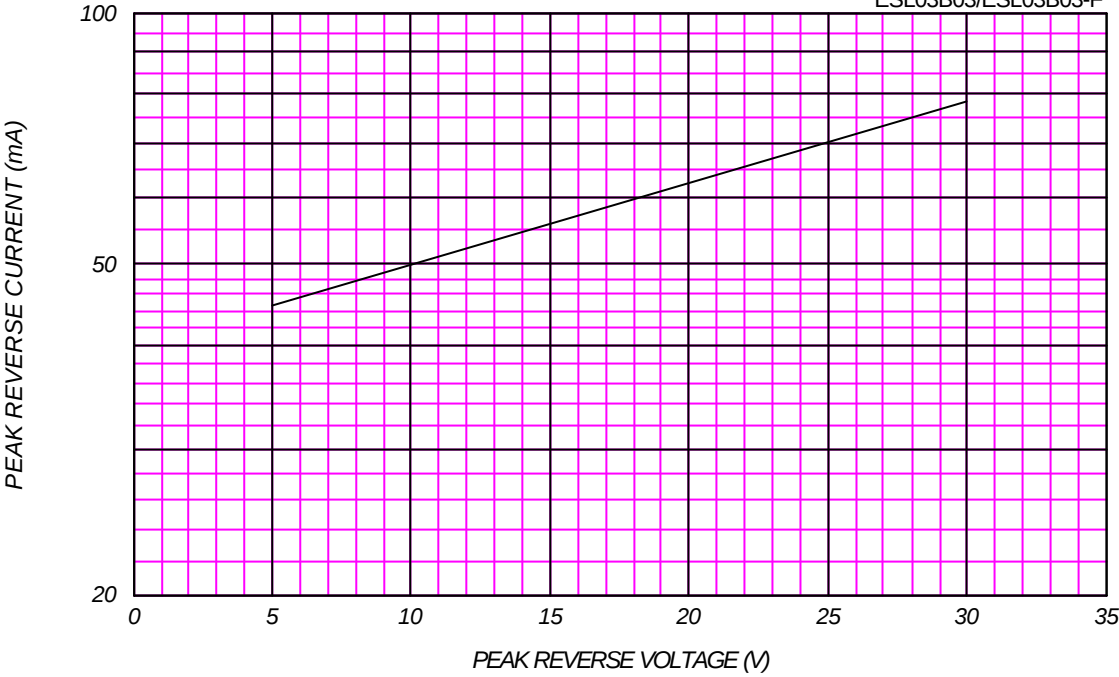
ESL03B03/ESL03B03-F



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

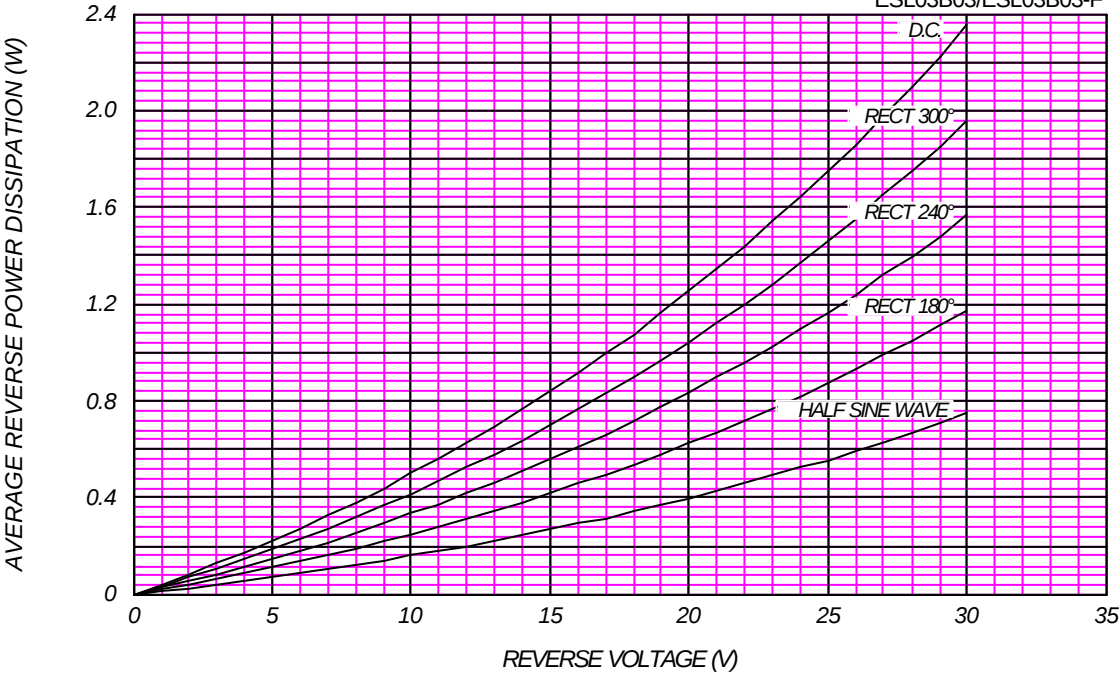
T_j = 100 °C

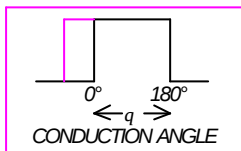
ESL03B03/ESL03B03-F



AVERAGE REVERSE POWER DISSIPATION

ESL03B03/ESL03B03-F

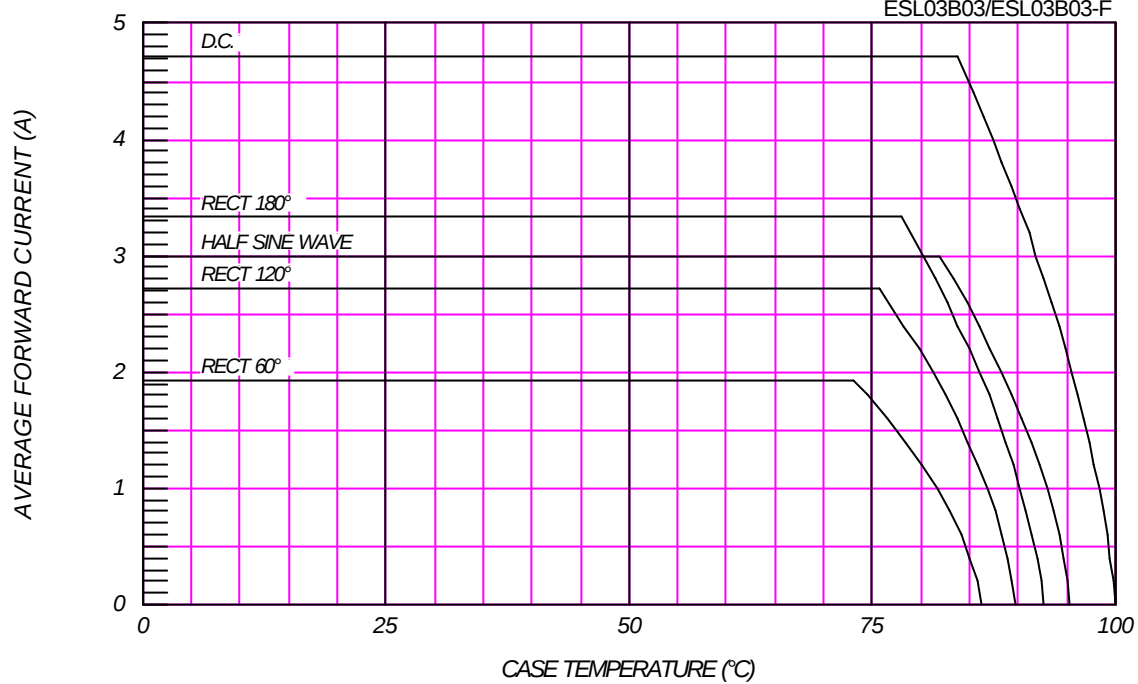




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

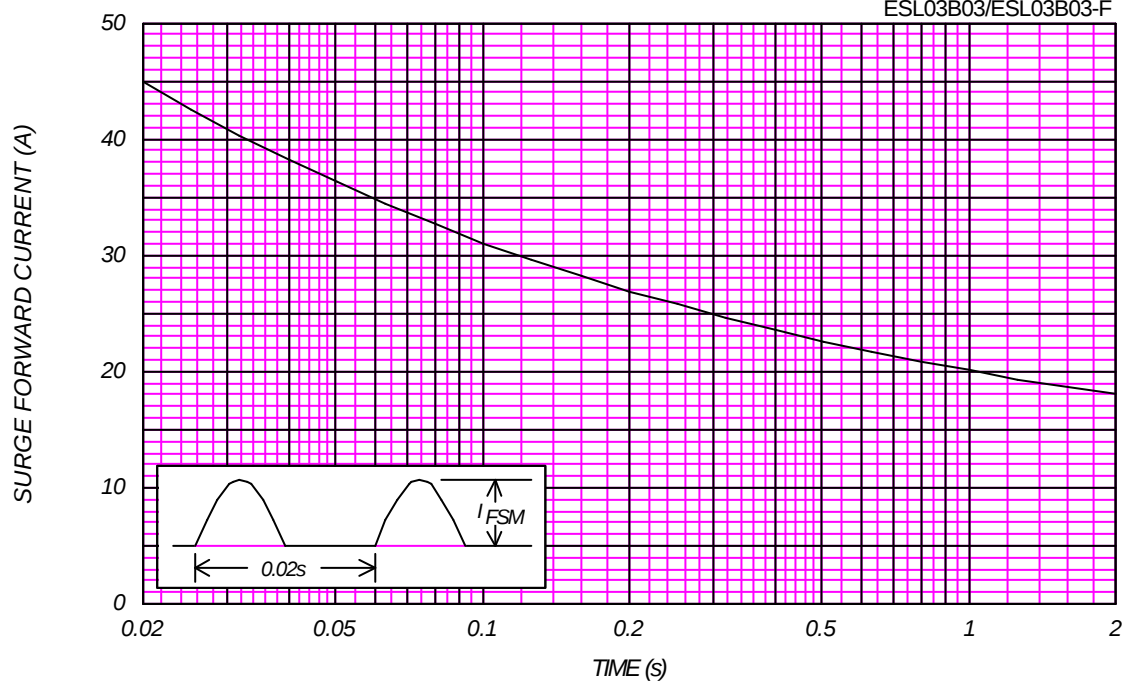
ESL03B03/ESL03B03-F



SURGE CURRENT RATINGS

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

ESL03B03/ESL03B03-F



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

