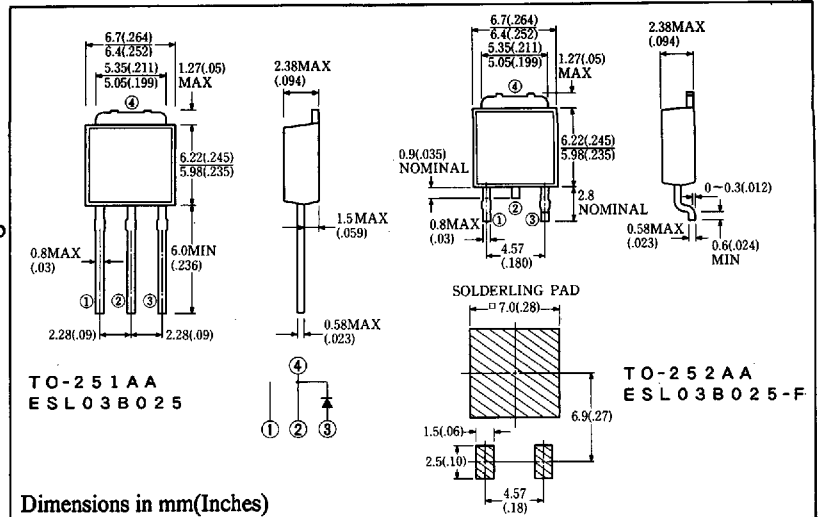


FEATURES

- TO-251AA Case : ESL03B025
- TO-252AA Case : ESL03B025-F
Surface Mounting Device
Packaged in 16mm Tape and Reel
- Extremely Low Forward Voltage Drop
- Low Power loss, High Efficiency
- High Surge Capability



Approx. Net Weight : 0.35Grams 0.3Grams

MAXIMUM RATINGS

Voltage Rating	TYPE	◆ ESL03B025 ◆ ESL03B025-F		Unit
	Symbol			
Repetitive Peak Reverse Voltage	V_{RRM}	25		V
Repetitive Peak Surge Reverse Voltage (Pulse width $\leq 1 \mu\text{ sec}$ (Duty $\leq 1/50$))	V_{RSM}	30		V
Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Output Current (resistive load)	I_O	180° rectangular wave conduction $T_c = 79^\circ\text{C}$	3.3	A
		180° sinusoidal wave conduction $T_c = 83^\circ\text{C}$	3.0	
RMS Forward Current	I_F (RMS)		4.71	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive	45	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	Test Condition	Typ.	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM}=3A, T_j=25^\circ\text{C}$	-	0.47	V
		$I_{FM}=1A, T_j=25^\circ\text{C}$	0.29	-	
Peak Reverse Current	I_{RM}	$V_{RM}=V_{RRM}, T_j=25^\circ\text{C}$	-	3	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	6	$^\circ\text{C/W}$

◆ For spare parts only

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FIG. 1- FORWARD VOLTAGE VS. FORWARD CURRENT

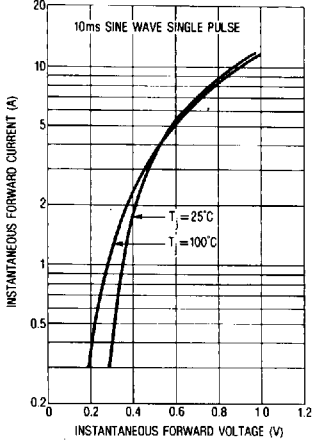


FIG. 2- AVERAGE FORWARD POWER DISSIPATION

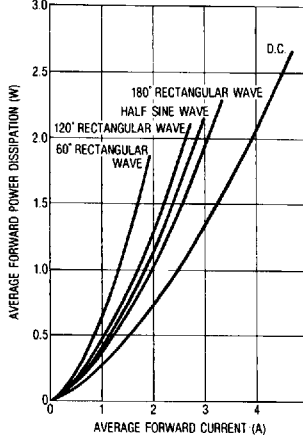


FIG. 3- PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

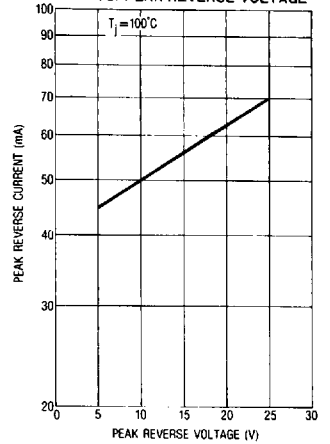


FIG. 4- AVERAGE REVERSE POWER DISSIPATION

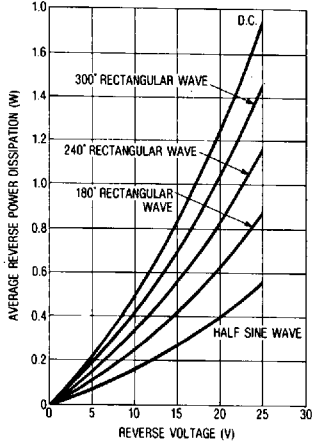


FIG. 5- AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

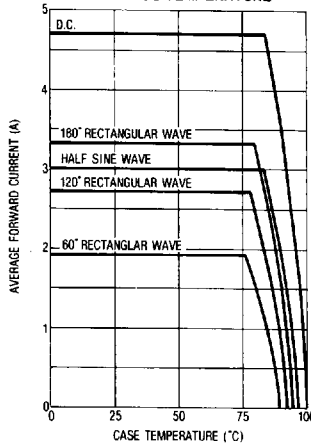


FIG. 6- SURGE CURRENT RATINGS

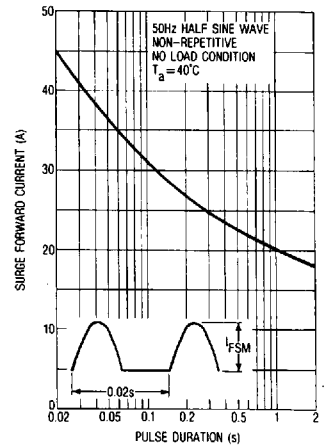


FIG. 7- JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

