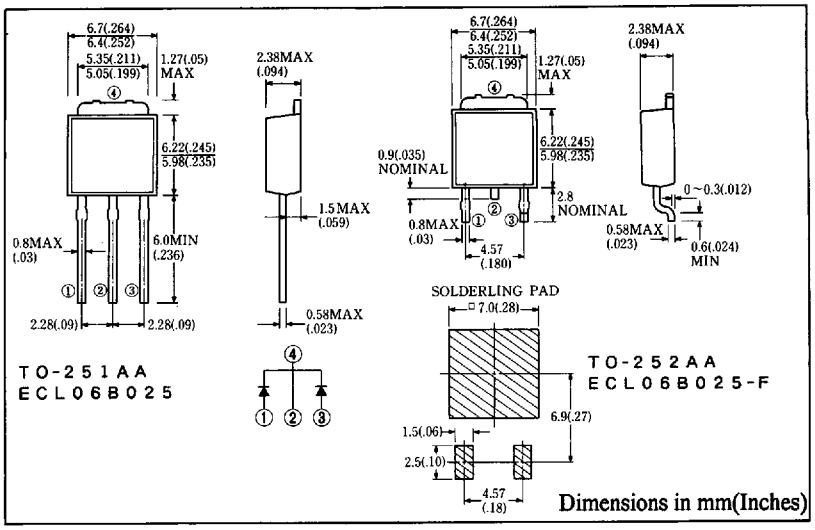
SCHOTTKY BARRIER DIODE

6.6A/25V

ECL06B025
ECL06B025-F

FEATURES

- TO-251AA Case : ECL06B025
- TO-252AA Case : ECL06B025 – F
  Surface Mounting Device
  Packaged in 16mm Tape and Reel
- Dual Diodes - Cathode Common
- Extremely Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability



Approx. Net Weight : 0.35 Grams 0.3Grams

MAXIMUM RATINGS

Voltage Rating	TYPE / Symbol	◆ ECL06B025 ◆ ECL06B025-F		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	25		V
Repetitive Peak Surge Reverse Voltage (Pulse width ≦ 1 μ sec) (Duty ≦ 1/50)	V_{RSM}	30		V
Electrical Rating	**Symbol**	**Condition**	**Rating**	**Unit**
Average Rectified Output Current (resistive load)	I_O	Full rectangular wave conduction T_C =67℃	6.6	A
		Full sinusoidal wave conduction T_C =72℃	6.0	
RMS Forward Current	$I_{F(RMS)}$		6.66	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz full sine wave, non – repetitive	45	A
Operating Junction Temperature Range	T_{jw}		– 40 to 100	℃
Storage Temperature Range	T_{stg}		– 40 to 125	℃

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Typ.	Max.	Unit
Peak Fowrard Voltage	V_{FM}	I_{FM}=3A, T_j=25℃ per diode leg	–	0.47	V
		I_{FM}=1A, T_j=25℃ per diode leg	0.29	–	
Peak Reverse Current	I_{RM}	V_{RM} = V_{RRM}, T_j=25℃ per diode leg	–	3	mA
Thermal Resisitance	$R_{th(j-c)}$	Junction to Case	–	5	℃/W

◆For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

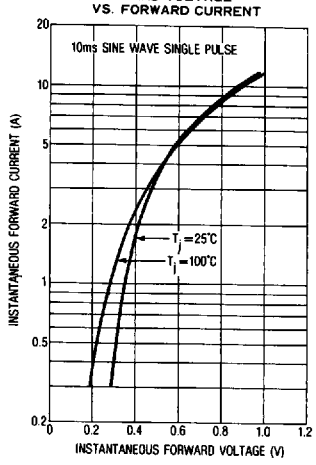


FIG.2-AVERAGE FORWARD POWER DISSIPSATION

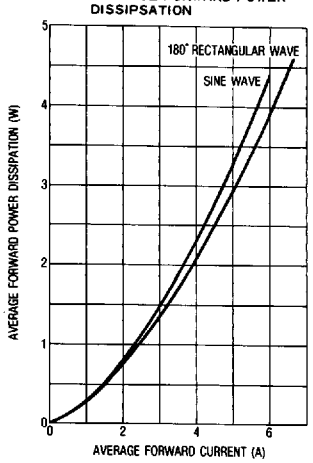


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

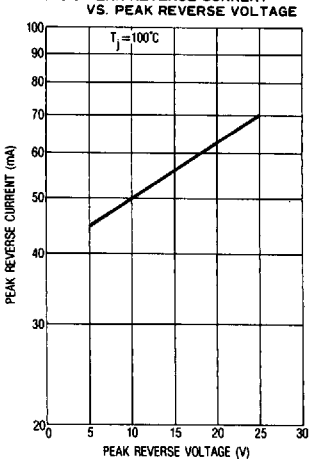


FIG.4-AVERAGE REVERSE POWER DISSIPATION

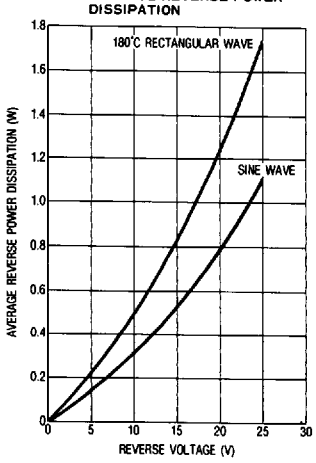


FIG.5-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

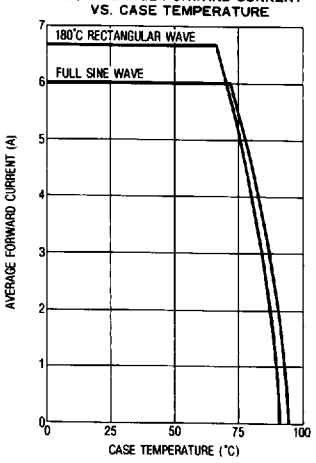


FIG.6-SURGE CURRENT RATINGS

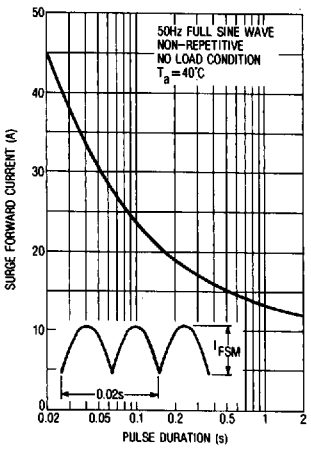
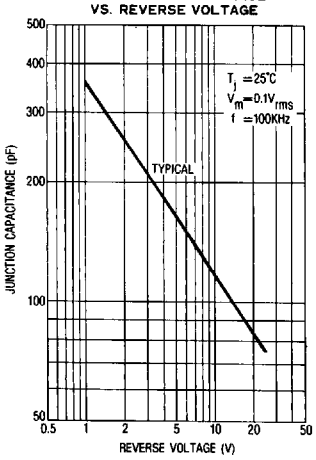


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE



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