

Germanium Transistor

XB103

20V / 10mA

DATASHEET

OEM – Ediswan Mazda

Source: Ediswan Mazda Databook 1957/58

GERMANIUM JUNCTION TRANSISTORS 37

Type No.	Use	ABSOLUTE RATINGS AT 45°C					CHARACTERISTICS AT 25°C						
		V _{ce} (max. pk.)	V _{ce} (max. mean)	V _{cb} (max. pk.)	P _c (max.)	T _j (max.)	I _{c(o)}	I _{e(o)}	I _{ce(o)}	Thermal resistance	f _c cut- off	α	β
XA101*	L.F. Amp. to 500 kc/s.	-12	-10	-12	20	55	10 ₁	10 ₂	70 ₄	0.5	5.0 ₂	0.97 ₂	35 ₂
XA102*	L.O. and F.C. to 2 Mc/s.	-12	-10	-12	20	55	10 ₁	10 ₂	70 ₄	0.5	8.0 ₂	0.975 ₂	40 ₂
XB102	L.F. Amp. or Driver	-20	-10		30	55	10 ₁		200 ₄			0.968 ₂	30 ₂
XB103	L.F. Amp. or Driver	-20	-10		30	55	10 ₁		200 ₄			0.985 ₂	66 ₂
XC101	Class B P.P. Output	-20	-10		83	70	10 ₁		200 ₄	0.3†		0.985 ₂	66 ₂

NOTES:

(1) At V_{cb} = -12 volts
 (2) At V_{cb} = -15 volts
 (3) At V_{cb} = -12 volts
 (4) At V_{ce} = -5 volts
 (5) At V_c = -5 volts, I_c = -1.0 mA
 (6) At V_c = -6 volts, I_c = -8.0 mA

* r_{bb'} = 75 ohms and C_{b'c} = 13.5 pF in equivalent π network.
 † 0.21 when clamped to 12 square inches (minimum) of aluminium plate.

OUTLINE AND CONNECTIONS

The technical drawings show the physical dimensions and connection points of the transistor. The top view shows a circular package with a diameter of 0.5 inches (±0.01 inches). The side view shows a height of 0.147 inches (±0.005 inches) and a base diameter of 0.290 inches (±0.005 inches). The connection view shows three leads labeled 'e', 'b', and 'c' with a diameter of 0.010 inches. A 'WHITE SPOT' is indicated on the top surface. The base diameter is also shown as 0.085 inches.