

Germanium Transistor

XB102

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 _{cut-} off	α	β	
XA101*	I.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 include:
- A top view showing a circular package with a diameter of 0.5" (+0.01").
- A side view showing a height of 0.147" (+0.005") and a base diameter of 0.290" (+0.005").
- A connection diagram showing the emitter (e), base (b), and collector (c) leads. The base lead is 0.010" wide, and the emitter and collector leads are 0.010" wide.
- A detail of the base connection showing a "WHITE SPOT" and a diameter of 0.065".