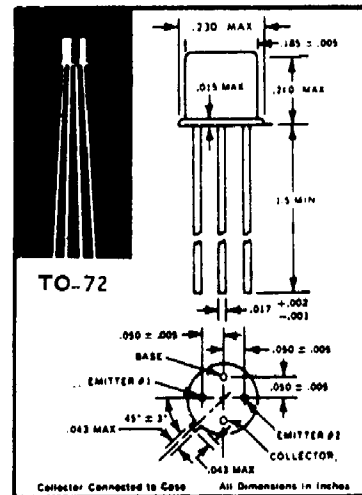


GEOMETRY 450

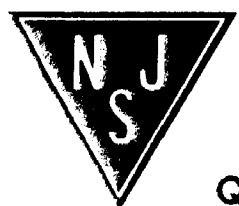
ELECTRICAL DATA ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	3N123	UNITS
Collector to Base Voltage	BV_{CB0}	30	V
Emitter (1) to Base Voltage	BV_{E_1B0}	25	V
Emitter (2) to Base Voltage	BV_{E_2B0}	25	V
Emitter to Emitter Voltage	$BV_{E_1E_20}$	25	V
Emitter (1) to Collector Voltage	BV_{E_1C0}	25	V
Emitter (2) to Collector Voltage	BV_{E_2C0}	25	V
DC Collector Current	I_C	20	mA
DC Base Current	I_B	20	mA
DC Emitter Current	I_E	10	mA
Power Diss. 25°C Ambient	P_T	300 (Derating 1.7 mW/°C)	mW
Junction Temp. (Oper. & Store)	T_J	-65°C to +200°C	
Lead Temp. (1/16" from Case)	T_L	240°C for 10 sec.	



ELECTRICAL CHARACTERISTICS: $T_A = 25^\circ\text{C}$ (UNLESS OTHERWISE STATED)

PARAMETER	SYMBOL	CONDITIONS	3N123		UNITS
			Min.	Max.	
Collector Cutoff Current	I_{CBO}	$V_{CB} = -25V, I_{E_1} = I_{E_2} = 0$		10	nA
Emitter Cutoff Current	$I_{E_1E_20}$	$V_{E_1E_2} = \pm 10V, V_{CB} = 0$ (shorted)		± 1	nA
Emitter Cutoff Current	$I_{E_1E_20}$	$V_{E_1E_2} = \pm 10V, V_{CB} = 0, T_A = 100^\circ\text{C}$ (shorted)		± 100	nA
Emitter Base Cutoff Current	I_{E_1B0}	V_{E_1B} (or V_{E_2B}) = -10V I_{E_2} (or I_{E_1}) = 0, $I_C = 0$		1	nA
Offset Voltage	V_O	$I_B = 1\text{mA}, I_{E_1} = I_{E_2} = 0, T_A = 0^\circ\text{C}, 25^\circ\text{C} \text{ \& } 85^\circ\text{C}$		250	μV
Offset Voltage/ I_B	$\Delta V_{E_1E_20}$	I_B (1) = 0.5mA, I_B (2) = 1.5mA $I_{E_1} = I_{E_2} = 0$		100	μV
Offset Voltage/Temp.	$\Delta V_{E_1E_20}$	T_A (1) = 0°C, T_A (2) = +85°C $I_B = 1\text{mA}, I_{E_1} = I_{E_2} = 0$		150	μV
Emitter to Base Capacitance	C_{eb}	V_{E_1B} (or V_{E_2B}) = -6V, $I_C = 0, f = 4\text{MHz}$		3	pfd
Collector to Base Capacitance	C_{cb}	$V_{CB} = -6V, I_E = I_{E_2} = 0, f = 4\text{MHz}$		10	pfd
Forward Current Gain	h_{fe}	V_{CE_1} (or V_{CE_2}) = -6V, $I_C = -1\text{mA}, f = 4\text{MHz}$	1.5		
Series "ON" Resistance	$r_{e_1e_2}$	$I_B = 1\text{mA}, I_{E_1} = I_{E_2} = 100\mu\text{A}$ $f = 60\text{Hz}$	10	100	Ohms



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