



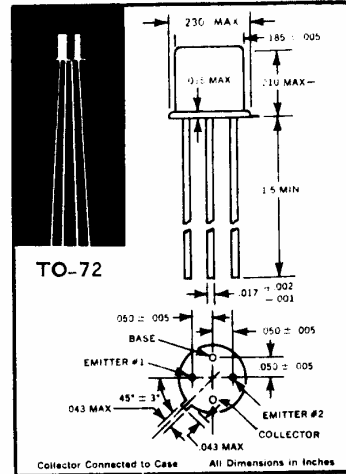
**HIGH VOLTAGE
SILICON EPITAXIAL JUNCTION
INTEGRATED CHOPPER TRANSISTOR**

**3N93
3N94
3N95**

- LOW LEAKAGE
- LOW C_{ob}
- LOW $r_{EE}(\text{sat})$
- HIGH V_{EE} & V_{EB}

ELECTRICAL DATA ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	3N93, 94, 95	UNITS
Collector to Base Voltage	BV_{CBO}	-50	Volts
Emitter (1) to Base Voltage	BV_{E1BO}	-50	Volts
Emitter (2) to Base Voltage	BV_{E2BO}	-50	Volts
Emitter to Emitter Voltage	BV_{E1E2O}	-50	Volts
Emitter (1) to Collector Voltage	BV_{E1CO}	-50	Volts
Emitter (2) to Collector Voltage	BV_{E2CO}	-50	Volts
Power Diss. @ 25°C Ambient	P_T	300 mW DERATING 1.7 mW/°C	
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	CONDITION	3N93			3N94			3N95			UNITS
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
Offset Voltage	V_{E1E2O}	$I_B = -1.0\text{mA}$	—	25	50	—	50	100	—	100	200	μV
Offset Voltage	ΔV_{E1E2O}	$I_B = -1.0\text{mA}$ TEMP = -25°C to +100°C	—	25	75	—	50	125	—	75	175	μV
Offset Voltage	ΔV_{E1E2O}	$\Delta I_B = 0.5$ to 1.5mA	—	10	25	—	25	50	—	25	75	μV
Saturation Resistance	$r_{E1E2}(\text{sat})$	$I_B = 1.0\text{mA}$	10	50	75	10	50	75	10	50	100	OHMS
Emitter Cutoff Current	I_{E1BO} I_{E2BO}	$V_{EB} = -25\text{V}$	—	.5	1	—	.5	1	—	.5	1	nA
Emitter Cutoff Current	I_{E1E2O}	$V_{EE} = \pm 25\text{V}$	—	.5	1	—	.5	1	—	.5	1	nA
Emitter Cutoff Current	I_{E1E2O}	$V_{EE} = \pm 25\text{V}$ TEMP = 100°C	—	50	75	—	50	75	—	50	75	nA
Emitter to Base Capacitance	C_{ob}	$V_{EB} = 6\text{V}$ $I_C = 0$ f = 4MC	—	2	3	—	2	3	—	2	3	pf
Collector to Base Capacitance	C_{ob}	$V_{CB} = -6\text{V}$ f = 4MC $I_C = 0$	—	6	10	—	6	10	—	6	10	pf

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