

**GENERAL PURPOSE  
SILICON EPITAXIAL JUNCTION  
PNP TRANSISTORS**

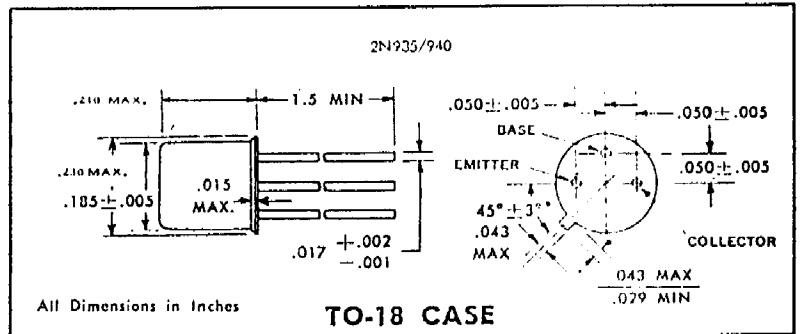
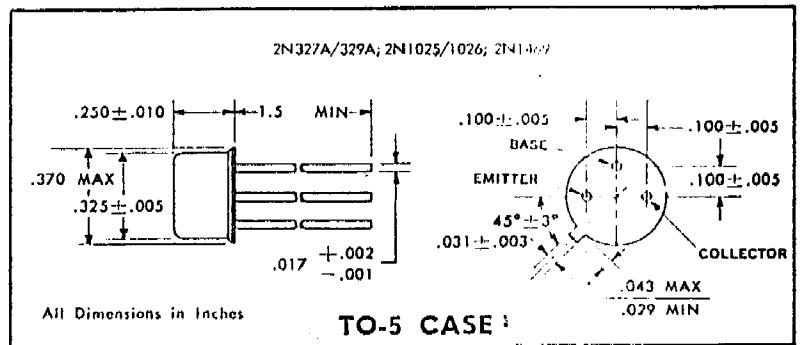
2N935 — 2N327A  
2N936 — 2N328A  
2N937 — 2N329A  
2N938 — 2N1025  
2N939 — 2N1026  
2N940 — 2N1469

**ELECTRICAL DATA ABSOLUTE MAXIMUM RATINGS**

PARAMETER	SYMBOL	2N935 2N327A	2N936 2N328A	2N937 2N329A	UNITS
Collector to Emitter Voltage	$BV_{CEO}$	-40	-35	-30	V
Collector to Base Voltage	$BV_{CBO}$	-50	-50	-50	V
Emitter to Base Voltage	$BV_{EBR}$	-20	-20	-20	V
Collector Current	$I_C$	-100mA			
Power Dissipation (free air)	$P_D$	250mW			
Junction Temp. (Oper. & Store)	$T_J$	-65°C to +165°C			
Lead Temp. (1/16" ± 1/32" From Case)	$T_L$	240°C for 10 sec.			
Derating Factor (free air)	$D_F$	1.85 mW/°C			

PARAMETER	SYMBOL	2N938 2N1025	2N939 2N1026	2N940 2N1469	UNITS
Collector to Emitter Voltage	$BV_{CEO}$	-35	-35	-35	V
Collector to Base Voltage	$BV_{CBO}$	-40	-40	-40	V
Emitter to Base Voltage	$BV_{EBR}$	-40	-40	-40	V
Collector Current	$I_C$	-100mA			
Power Dissipation (free air)	$P_D$	250mW			
Junction Temp. (Oper. & Store)	$T_J$	-65°C to +165°C			
Lead Temp. (1/16" ± 1/32" From Case)	$T_L$	230°C for 10 sec.			
Derating Factor (free air)	$D_F$	1.66 mW/°C			



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**ELECTRICAL CHARACTERISTICS: T<sub>A</sub> = 25 °C (UNLESS OTHERWISE STATED)**

PARAMETER	SYMBOL	CONDITION	2N935/2N327A			2N936/2N328A			2N937/2N329A			UNITS
			MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
Collector-Base Leakage Current	I <sub>CBO</sub>	V <sub>CB</sub> = -30V	-	5.0	100	-	5.0	100	-	5.0	100	nA
Emitter-Base Leakage Current	I <sub>EB0</sub>	V <sub>EB</sub> = -20V	-	5.0	100	-	5.0	100	-	5.0	100	nA
Collector Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -5mA, I <sub>B</sub> = -2mA	-	-	0.3	-	-	0.5	-	-	0.6	V
A.C. Current Gain	h <sub>fe</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = 1.0mA, f = 1KC	9	14	22	18	28	44	36	60	88	
Collector to Base Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -5V, f = 100KC	-	70	110	-	70	110	-	70	110	pf
Alpha Cutoff Frequency	f <sub>α</sub>	V <sub>CB</sub> = -6V, I <sub>C</sub> = 1.0mA	0.15	0.2	-	0.2	0.3	-	0.25	0.5	-	MC
Spot Noise Figure	N.F.	I <sub>C</sub> = -1.0mA, R <sub>G</sub> = 1KΩ	-	18	-	-	18	-	-	18	-	db
PARAMETER	SYMBOL	CONDITION	2N938/2N1025			2N939/2N1026			2N940/2N1469			UNITS
			MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
Collector-Base Leakage Current	I <sub>CBO</sub>	V <sub>CB</sub> = -35V	-	1.0	25	-	1.0	25	-	1.0	25	nA
Emitter-Base Leakage Current	I <sub>EB0</sub>	V <sub>EB</sub> = -35V	-	1.0	25	-	1.0	25	-	1.0	25	nA
Collector Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -5mA, I <sub>B</sub> = -2mA	-	-	0.3	-	-	0.3	-	-	0.3	V
A.C. Current Gain	h <sub>fe</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = 1.0mA, f = 1KC	9	15	22	18	30	44	36	60	88	
Collector to Base Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -6V, f = 1MC	-	7	12	-	7	12	-	7	12	pf
Alpha Cutoff Frequency	f <sub>α</sub>	V <sub>CB</sub> = -6V, I <sub>C</sub> = 1.0mA	1.0	-	-	2.0	-	-	2.0	-	-	MC
Spot Noise Figure	N.F.	I <sub>C</sub> = -1.0mA, R <sub>G</sub> = 1KΩ	-	-	25	-	-	25	-	-	25	db