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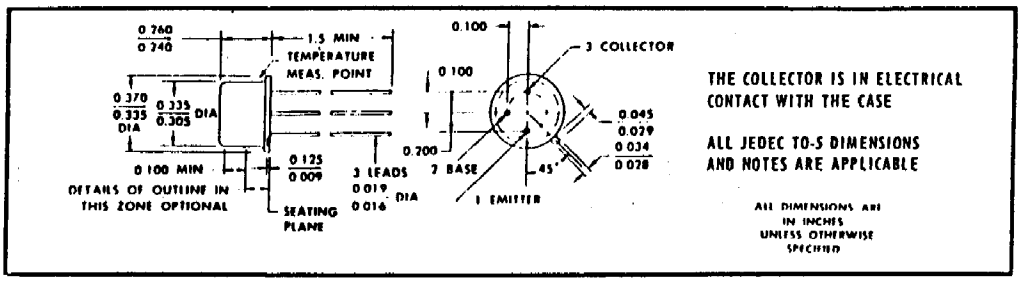
2N2927

PNP VHF AMPLIFIERS, HIGH CURRENT SWITCHES

mechanical data



ABSOLUTE MAXIMUM RATINGS

	2N2927
Maximum Temperatures	
Storage Temperature	−65°C to +200°C
Operating Junction Temperature	200°C Maximum
Lead Temperature (Soldering, 60 sec Time Limit)	300°C Maximum
Maximum Power Dissipation	
Total Dissipation at 25°C Case Temperature	3.0 Watts
at 100°C Case Temperature	1.7 Watts
at 25°C Ambient Temperature	0.8 Watt
Maximum Voltages	
V_{CBO} Collector to Base Voltage	−25 Volts
V_{CEO} Collector to Emitter Voltage	−25 Volts
V_{EBO} Emitter to Base Voltage	−4.0 Volts
I_C Collector Current	500 mA

ELECTRICAL CHARACTERISTICS (25°C Free Air Temperature unless otherwise noted)

SYMBOL	CHARACTERISTICS	MIN.	MAX.	UNITS	TEST CONDITIONS
h_{FE}	DC Pulse Current Gain	30	130		I_C = 50 mA V_{CE} = −1.0 V
h_{FE}	DC Pulse Current Gain	20			I_C = 300 mA V_{CE} = −2.0 V
h_{FE} (−55°C)	DC Pulse Current Gain	12			I_C = 50 mA V_{CE} = −1.0 V
V_{BE} (sat)	Base Saturation Voltage		−1.1	Volts	I_C = 50 mA I_B = 2.5 mA
V_{BE} (sat)	Base Saturation Voltage		−2.0	Volts	I_C = 300 mA I_B = 30 mA
V_{CE} (sat)	Collector Saturation Voltage		−0.25	Volts	I_C = 50 mA I_B = 2.5 mA
V_{CE} (sat)	Collector Saturation Voltage		−1.0	Volts	I_C = 300 mA I_B = 30 mA
h_{fe}	High Frequency Current Gain (f = 100 mc)	1.0			I_C = 50 mA V_{CE} = −3.0 V
C_{ob}	Output Capacitance		20	pf	I_E = 0 V_{CB} = −10 V
I_{CBO}	Collector Cutoff Current		25	nA	I_E = 0 V_{CB} = −10 V
I_{CBO} (150°C)	Collector Cutoff Current		5.0	μA	I_E = 0 V_{CB} = −10 V
BV_{CBO}	Collector to Base Breakdown Voltage	−25		Volts	I_C = 100 μA I_E = 0
V_{CEO} (sust)	Collector to Emitter Sustaining Voltage	−25		Volts	I_C = 30 mA I_B = 0 (pulsed)
BV_{EBO}	Emitter to Base Breakdown Voltage	−4.0		Volts	I_C = 0 I_E = 100 μA
T_{on}	Turn On Time		75	nsec	$I_C \approx$ 300 mA $I_{B_1} \approx$ 30 mA
T_{off}	Turn Off Time		170	nsec	$I_C \approx$ 300 mA $I_{B_1} \approx$ 30 mA $I_{B_2} \approx$ −30 mA