



IF TRANSISTOR SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS (25°C)

		2N169	2N449	2N1121	
Voltage	Collector to Emitter (base open)	V_{CE}	15	15	15 volts
	Collector to Base (emitter open)	V_{CB}	15	15	15 volts
Current	Collector	I_C	-20	-20	-20 ma
	Power	Collector Dissipation at 25°C*	P_{CM}	65	65
Temperature Range	Operating and Storage	T_A-T_{STG}	-55 to 85°	-55 to 85°	-55 to 85°C

*Derate 1.1 mw/°C increase in ambient temperature.

ELECTRICAL CHARACTERISTICS** (25°C)

IF AMPLIFIER SERVICE

Maximum Ratings		2N169	2N449	2N1121
Collector Supply Voltage	V_{CC}	9	9	9 volts
Design Center Characteristics ($I_C = 1$ ma; $V_{CB} = 5$ v; $f = 455$ KC except as noted)				
Input Impedance	Z_i	700	700	700 ohms
Output Impedance	Z_o	7K	7K	7K ohms
Voltage Feedback Ratio ($V_{CB} = 5$ v; $f = 1$ mc)	h_{fb}	10	10	10×10^{-3}
Collector to Base Capacitance ($V_{CB} = 5$ v; $f = 1$ mc)	C_{cb}	2.4	2.4	2.4 μ f
Frequency Cutoff ($V_{CB} = 5$ v)	f_{cb}	8	8	8 mc
Base Current Gain ($I_C = 1$ ma; $V_{CE} = 1$ v)	h_{FB}	72	72	72
Minimum Base Current Gain	h_{FE}	34	34	34
IF Amplifier Performance				
Collector Supply Voltage	V_{CC}	5	5	5 volts
Collector Current	I_C	2	2	2 ma
Input Frequency	f	455	455	455 KC
Minimum Power Gain in Typical IF Circuit	G_p	27	24.5	29.5 db
Power Gain Range of Variation in Typical IF Circuit	G_e	2.5	2.5	2.5 db

CUTOFF CHARACTERISTICS

Collector Cutoff Current ($V_{CB} = 5$ v)	I_{co}	.5	.5	.5 μ a
Collector Cutoff Current ($V_{CB} = 15$ v)	I_{co}	5	5	5 μ a max

**All values are typical unless indicated as a min. or max.

