

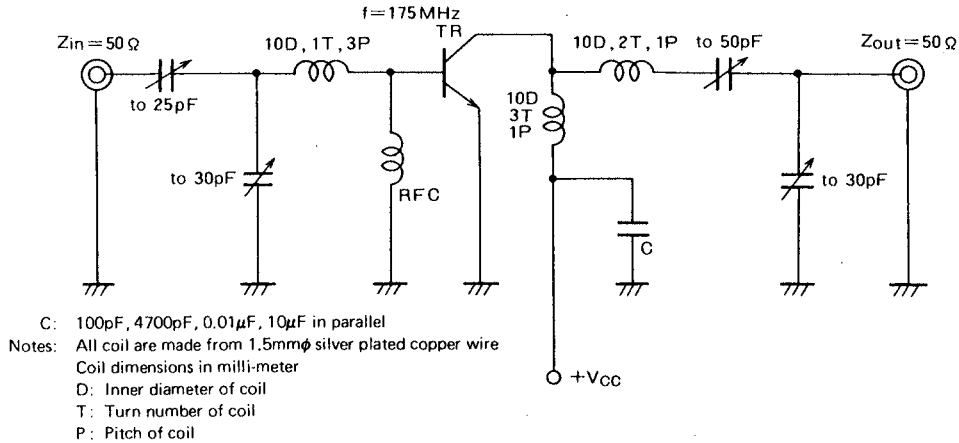
2SC1947

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)EBO}$	Emitter to base breakdown voltage	$I_E = 5 \text{ mA}, I_C = 0$	4			V
$V_{(BR)CBO}$	Collector to base breakdown voltage	$I_C = 10 \text{ mA}, I_E = 0$	35			V
$V_{(BR)CEO}$	Collector to emitter breakdown voltage	$I_C = 50 \text{ mA}, R_{BE} = \infty$	17			V
I_{CBO}	Collector cutoff current	$V_{CB} = 25 \text{ V}, I_E = 0$			500	μA
I_{EBO}	Emitter cutoff current	$V_{EB} = 3 \text{ V}, I_C = 0$			500	μA
h_{FE}	DC forward current gain *	$V_{CE} = 10 \text{ V}, I_C = 0.1 \text{ A}$	10	50	180	—
P_O	Output power **		3.5	4		W

MITSUBISHI RF POWER TRANSISTOR 2SC1947

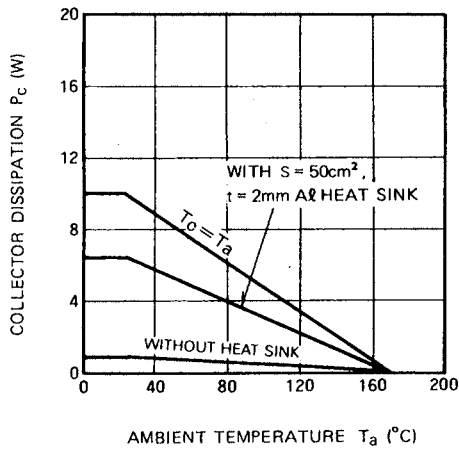
NPN EPITAXIAL PLANAR TYPE

TEST CIRCUIT

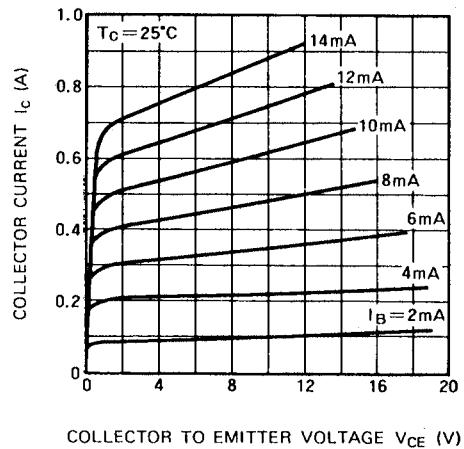


TYPICAL PERFORMANCE DATA

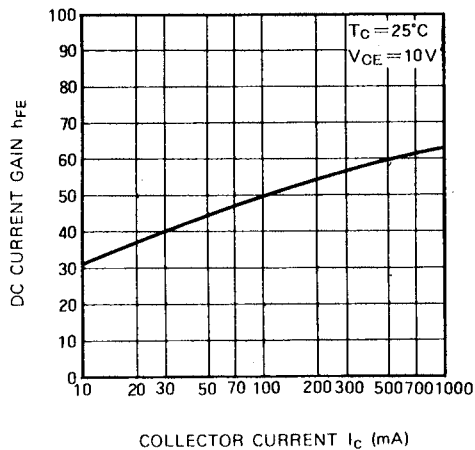
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



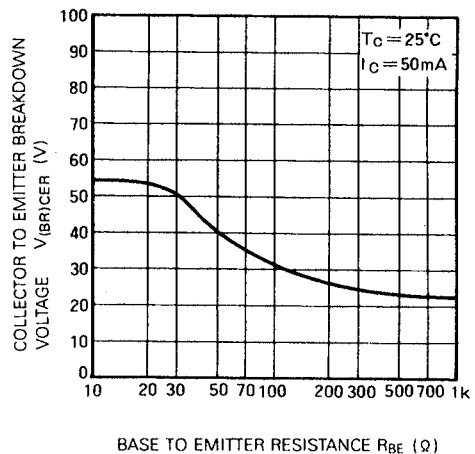
COLLECTOR CURRENT VS. COLLECTOR TO EMITTER VOLTAGE



DC CURRENT GAIN VS. COLLECTOR CURRENT



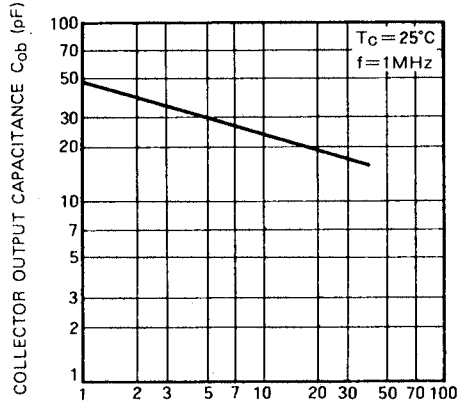
COLLECTOR TO EMITTER BREAKDOWN VOLTAGE VS. BASE TO EMITTER RESISTANCE



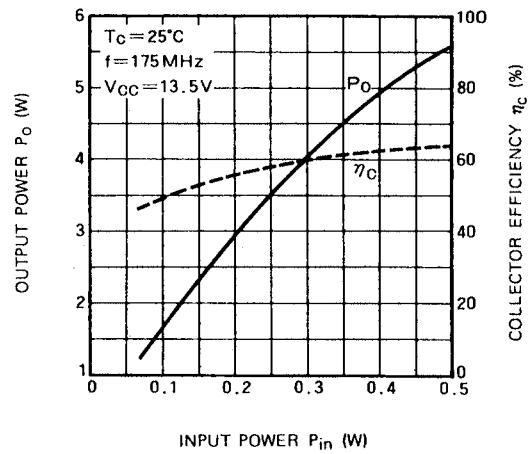
MITSUBISHI RF POWER TRANSISTOR
2SC1947

NPN EPITAXIAL PLANAR TYPE

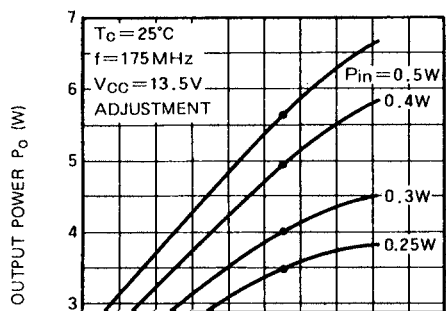
**COLLECTOR OUTPUT CAPACITANCE VS.
 COLLECTOR TO BASE VOLTAGE**



**OUTPUT POWER,
 COLLECTOR EFFICIENCY
 VS. INPUT POWER**



**OUTPUT POWER VS. COLLECTOR
 SUPPLY VOLTAGE**



8 10 12 14 16 18

COLLECTOR SUPPLY VOLTAGE V_{CC} (V)