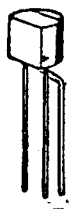
BF 297 · BF 298 · BF 299

NPN HIGH VOLTAGE VIDEO AMPLIFIERS

MICRO ELECTRONICS

THE BF297, BF298, BF299 ARE NPN SILICON PLANAR TRANSISTORS DESIGNED FOR HIGH VOLTAGE VIDEO AMPLIFIERS IN TELEVISION RECEIVERS. THEY FEATURE GOOD FREQUENCY CHARACTERISTICS.

CASE TO-92F



CEB

ABSOLUTE MAXIMUM RATINGS		BF297	BF298	BF299
Collector-Base Voltage	V_{CBO}	160V	250V	300V
Collector-Emitter Voltage	V_{CEO}	160V	250V	300V
Emitter-Base Voltage	V_{EBO}		5V	
Collector Current	I_C		100mA	
Total Power Dissipation @ $T_C \leq 25^\circ C$	P_{tot}		1.5W	
@ $T_A \leq 25^\circ C$			625mW	
Operating Junction & Storage Temperature	T_j & Tstg		-55 to 150°C	

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ C$ unless otherwise noted)

PARAMETER	SYMBOL	BF297 MIN	BF297 MAX	BF298 MIN	BF298 MAX	BF299 MIN	BF299 MAX	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	BV_{CBO}	160		250		300		V	I_C=0.1mA I_E=0
Collector-Emitter Breakdown Voltage	LV_{CEO}	160		250		300		V	I_C=10mA I_B=0
Emitter-Base Voltage	BV_{EBO}	5		5		5		V	I_E=0.1mA I_C=0
Collector Cutoff Current	I_{CBO}		50					nA	V_{CB}=100V I_E=0
					50			nA	V_{CB}=200V I_E=0
							50	nA	V_{CB}=250V I_E=0
Emitter Cutoff Current	I_{EBO}		50		50		50	nA	V_{EB}=3V I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		1		1		1	V	I_C=30mA I_B=3mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		0.85		0.85		0.85	V	I_C=30mA I_B=3mA
D.C. Current Gain	H_{FE}	10		10		10			I_C=5mA V_{CE}=10V
		30	150	30	150	30	150		I_C=30mA V_{CE}=10V
		10		10		10			I_C=100mA V_{CE}=10V
Current Gain-Bandwidth Product	f_T	50		50		50		MHz	I_C=30mA V_{CE}=10V
Collector-Base Capacitance	Cob		5		5		5	pF	V_{CB}=30V I_E=0 f=1MHz

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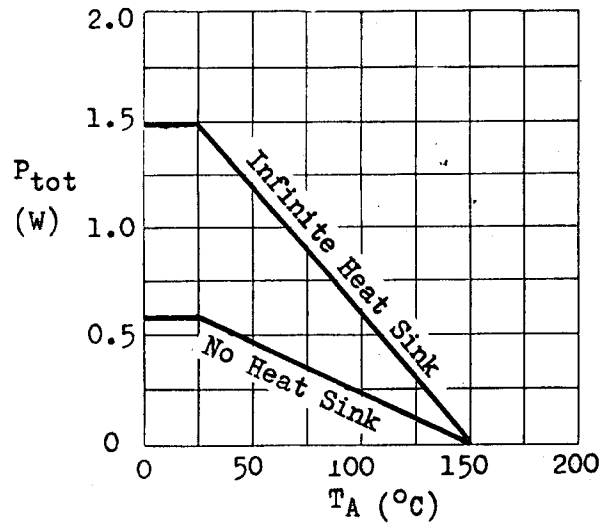
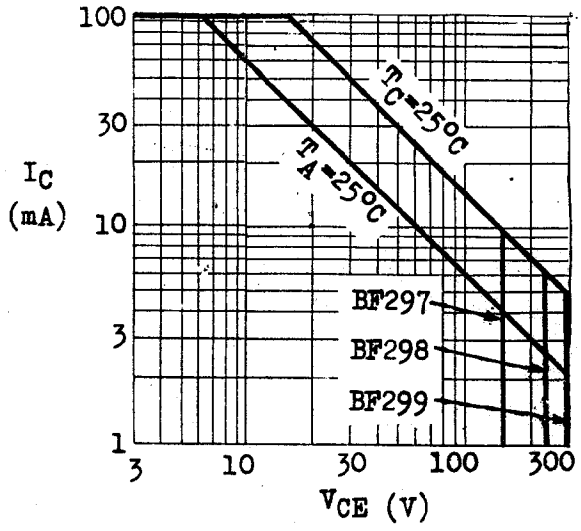
KWUN TONG P. O. BOX69477 CABLE ADDRESS "MICROTRON"
TELEPHONE:- 3-430181-6 ~~3-893369~~, ~~3-892423~~
FAX: 3-410321

TYPICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

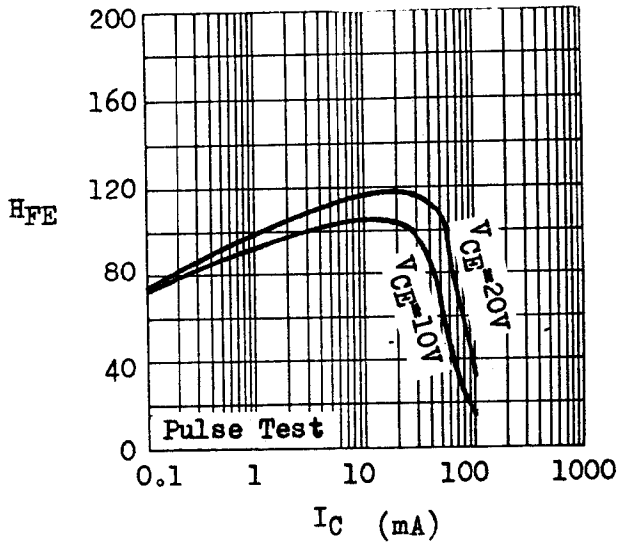
P_{tot} vs T_A



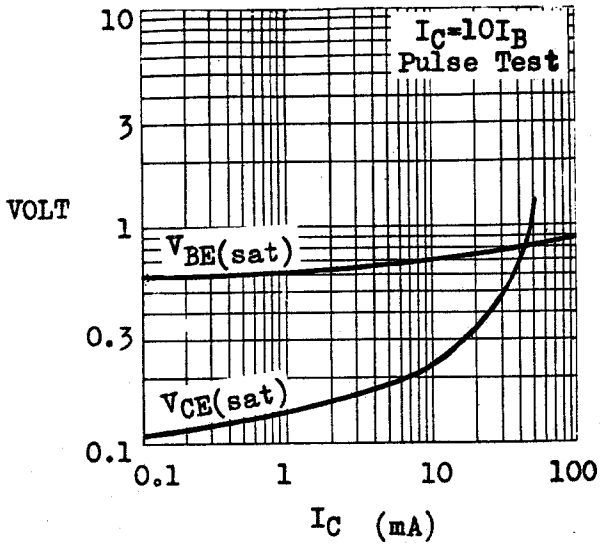
SAFE OPERATING AREA (D.C.)



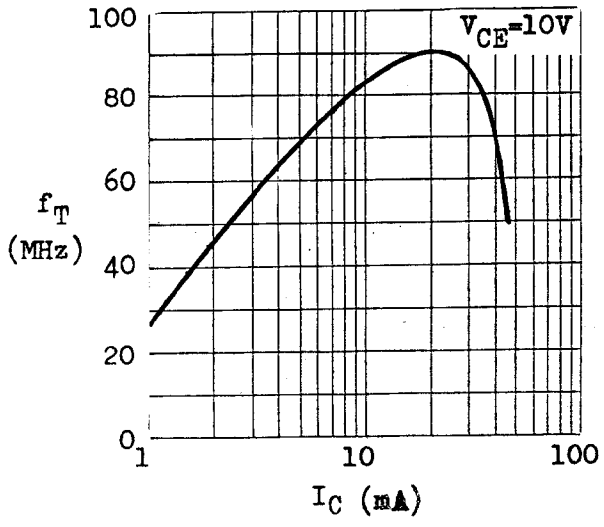
H_{FE} vs I_C



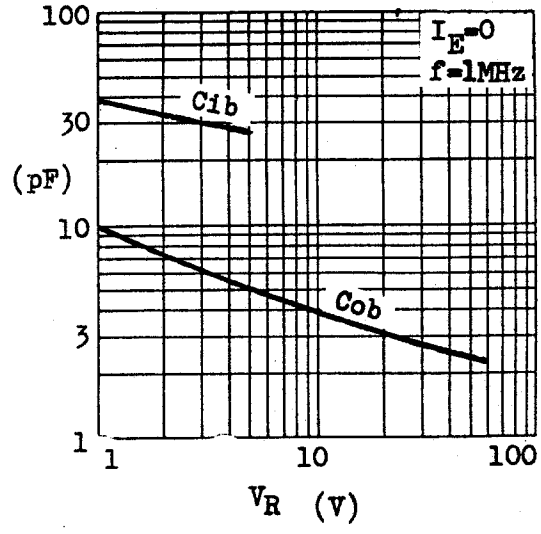
$V_{BE(sat)}$ & $V_{CE(sat)}$ vs I_C



f_T vs I_C



C_{ib} & C_{ob} vs V_R



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