



# BF 391 · BF 392 · BF 393

NPN HIGH VOLTAGE VIDEO AMPLIFIERS



THE BF391, BF392, BF393 ARE NPN SILICON PLANAR TRANSISTORS DESIGNED FOR HIGH VOLTAGE VIDEO AMPLIFIERS IN TELEVISION RECEIVERS. THEY FEATURE 200V MINIMUM COLLECTOR-EMITTER BREAKDOWN VOLTAGE AND GOOD FREQUENCY CHARACTERISTICS.

CASE TO-92A



ABSOLUTE MAXIMUM RATINGS

		<u>BF391</u>	<u>BF392</u>	<u>BF393</u>
Collector-Base Voltage	V <sub>CB0</sub>	200V	250V	300V
Collector-Emitter Voltage	V <sub>CE0</sub>	200V	250V	300V
Emitter-Base Voltage	V <sub>EB0</sub>		6V	
Collector Current	I <sub>CM</sub>		500mA	
Total Power Dissipation @ T <sub>C</sub> ≤ 25°C	P <sub>tot</sub>		1.5W	
	@ T <sub>A</sub> ≤ 25°C		625mW	
Operating Junction & Storage Temperature	T <sub>j</sub> & T <sub>stg</sub>	-55 to 150°C		

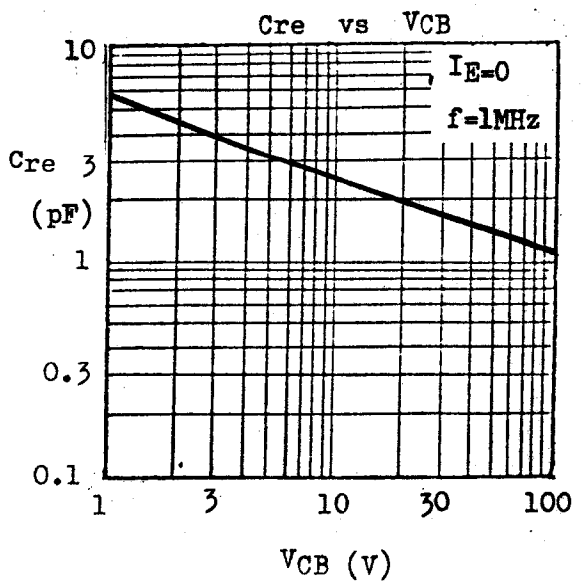
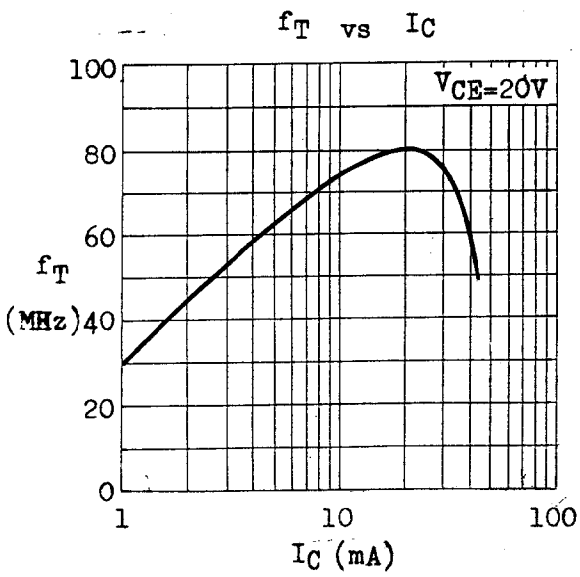
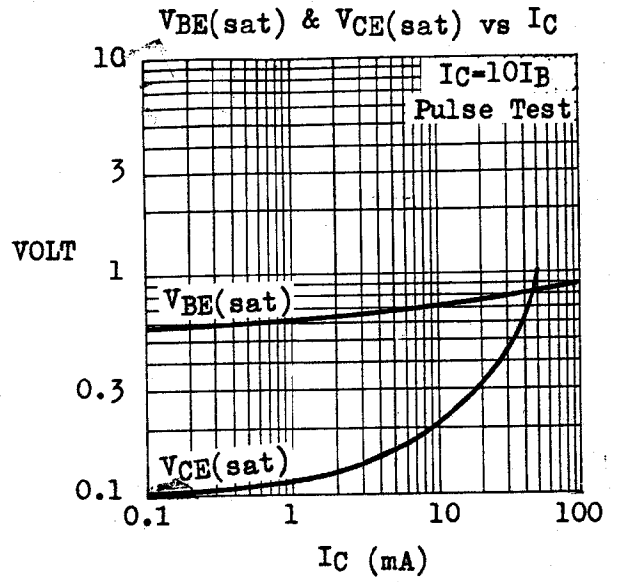
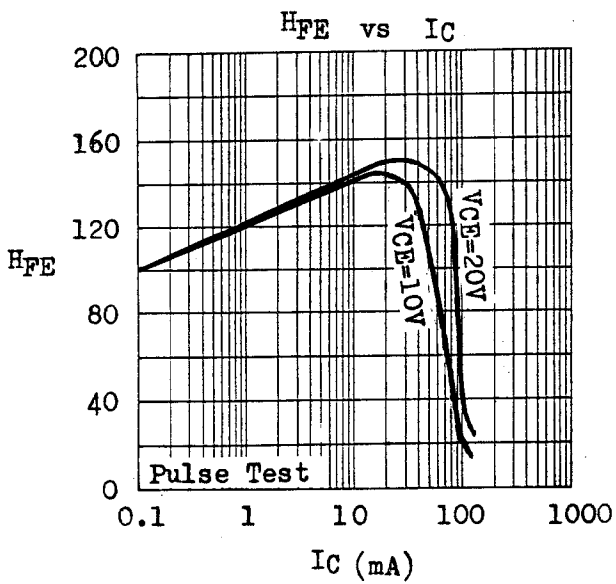
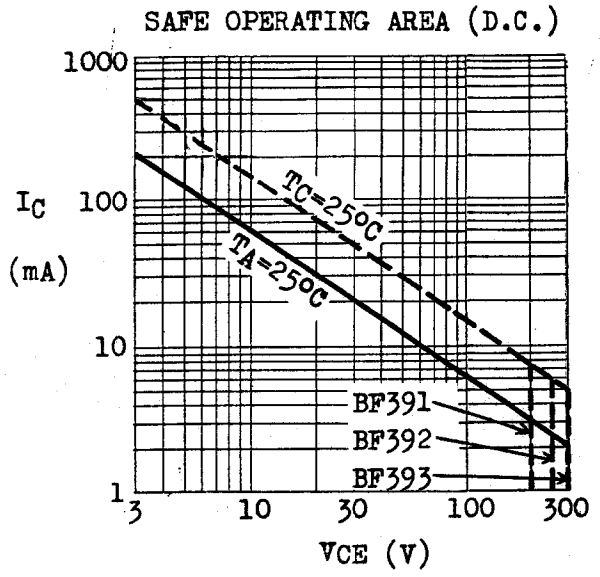
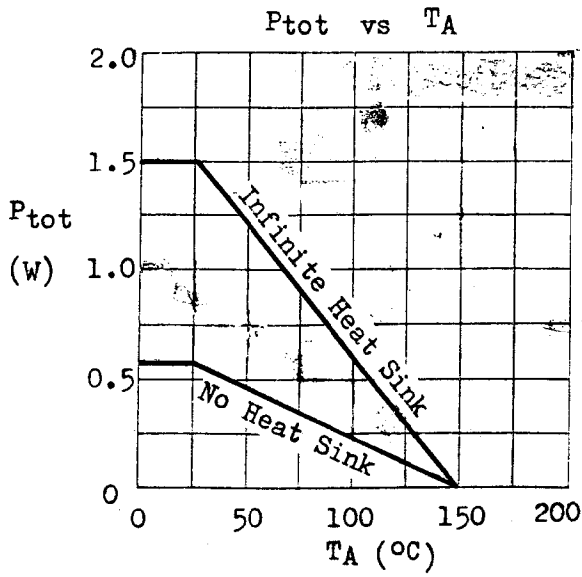
ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	BF391		BF392		BF393		UNIT	TEST CONDITIONS
		MIN	MAX	MIN	MAX	MIN	MAX		
Collector-Base Breakdown Voltage	V <sub>CB0</sub>	200		250		300		V	I <sub>C</sub> =0.1mA I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	V <sub>CE0</sub>	200		250		300		V	I <sub>C</sub> =1mA I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	V <sub>EB0</sub>	6		6		6		V	I <sub>E</sub> =0.1mA I <sub>C</sub> =0
Collector Cutoff Current	I <sub>CB0</sub>	0.1						μA	V <sub>CB</sub> =160V I <sub>E</sub> =0
					0.1	0.1		μA	V <sub>CB</sub> =200V I <sub>E</sub> =0
Emitter Cutoff Current	I <sub>EB0</sub>	0.1						μA	V <sub>EB</sub> =4V I <sub>C</sub> =0
					0.1	0.1		μA	V <sub>EB</sub> =6V I <sub>C</sub> =0
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>		2		2		2	V	I <sub>C</sub> =20mA I <sub>B</sub> =2mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>		2		2		2	V	I <sub>C</sub> =20mA I <sub>B</sub> =2mA
D.C. Current Gain	h <sub>FE</sub>	25		25		25			I <sub>C</sub> =1mA V <sub>CE</sub> =10V
		40		40		40			I <sub>C</sub> =10mA V <sub>CE</sub> =10V
Current Gain-Bandwidth Product	f <sub>T</sub>	50		50		50		MHz	I <sub>C</sub> =10mA V <sub>CE</sub> =20V
Feedback Capacitance	C <sub>re</sub>		2		2		2	pF	V <sub>CB</sub> =60V I <sub>E</sub> =0 f=1MHz

**MICRO ELECTRONICS LTD.**

38 HUNG TO ROAD, KWUN TONG, HONG KONG. TELEX 43510  
 KWUN TONG P. O. BOX 69477 CABLE ADDRESS "MICROTRON"  
 TELEPHONE: 3-430181-6 3-899363; 3-892423

FAX: 3-410321





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.