

BC486 BC488 BC490

PNP SILICON PLANAR EPITAXIAL TRANSISTORS

MICRO ELECTRONICS

BC486, BC488 and BC490 are PNP silicon planar epitaxial transistors designed for use as high voltage high current driver and output transistors.

CASE TO-92F



CBE

ABSOLUTE MAXIMUM RATINGS

		BC486	BC488	BC490
Collector-Base Voltage	VCBO	45V	60V	80V
Collector-Emitter Voltage	VCEO	45V	60V	80V
Emitter-Base Voltage	VEBO		5V	
Collector Current	IC		1A	
Total Power Dissipation @ $T_A=25^\circ\text{C}$	Ptot		625mW	
			1.5W	
Operating Junction & Storage Temperature	Tj, Tstg	-55 to +150°C		

ELECTRICAL CHARACTERISTICS AT $T_A=25^\circ\text{C}$

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	BVCBO	↑			V	IC=0.1mA IE=0
Collector-Emitter Breakdown Voltage	BVCEO	Note 1			V	IC=10mA IB=0
Emitter-Base Breakdown Voltage	BVEBO	↓			V	IE=10μA IC=0
Collector Cutoff Current	ICBO			100	nA	VCB=VCBO IE=0
Collector-Emitter Saturation Voltage	VCE(SAT)*			0.5	V	IC=500mA IB=50mA
Base-Emitter Saturation Voltage	VBE(SAT)*			1.2	V	IC=500mA IB=50mA
D.C. Current Gain	HFE*	40				IC=10mA VCE=2V
		60		400		IC=100mA VCE=2V
		60		150		IC=100mA VCE=2V
		100		250		IC=100mA VCE=2V
		160		400		IC=100mA VCE=2V
		15				IC=1A VCE=5V
Current Gain-Bandwidth Product	fT		75		MHz	IC=50mA VCE=2V
Output Capacitance	Cob		12		pF	VCB=10V IE=0
Input Capacitance	Cib		85		pF	VBE=2V IC=0

(Note 1: equal to the values of the absolute maximum ratings.)

Pulse Test: Pulse Width=0.3ms, Duty Cycle=1%