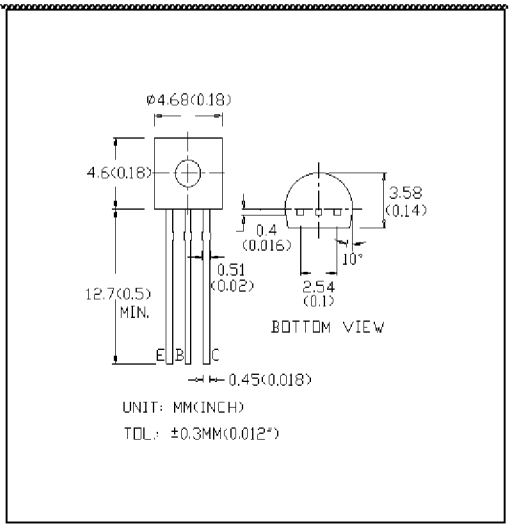
MICRO ELECTRONICS

BC450

PNP SILICON TRANSISTOR

DESCRIPTION

BC450 is PNP silicon planar transistor designed for use as high voltage driver and output transistor. Particularly suitable as power darlington drivers.



ABSOLUTE MAXIMUM RATINGS

Collector-Emitter Voltage	VCEO	100V
Collector-Base Voltage	VCBO	100V
Emitter-Base Voltage	VEBO	5V
Collector Current Continuous	IC	300mA
Total Power Dissipation @ Ta<25°C	Ptot	625mW
Operating & Storage Junction Temperature	Tj,Tstg	-55 to +150°C

ELECTRO-OPTICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN	MAX	UNIT	CONDITIONS	
Collector-Emitter Breakdown Voltage	LVCEO*	100		V	IC=1mA	IB=0
Collector-Base Breakdown Voltage	BVCBO	100		V	IC=0.1mA	IE=0
Emtter-Base Breakdown Voltage	BVEBO	4		V	IE=0.01mA	IC=0
Collector Cutoff Current	ICBO		100	nA	VCB=60V	IE=0
D.C. Current Gain	HFE*	50	460		IC=2mA**	VCE=5V
		50			IC=10mA**	VCE=5V
		50			IC=100mA**	VCE=5V
Collector-Emitter Saturation Voltage	VCE(sat)*		0.25	V	IC=100mA	IB=10mA
Base-Emitter Saturation Voltage	VBE(sat)*	0.85	TYP.	V	IC=100mA	IB=10mA
Base-Emitter Voltage	VBE*		1.2	V	IC=100mA	VCE=5V
Current Gain Bandwidth Product	fT	100		MHz	IC=50mA	VCE=5V
					f=100MHz	
Output Capacitance	Cob	3	TYP.	pF	VCB=10V	f=1MHz
Input Capacitance	Cib	20	TYP.	pF	VEB=0.5V	f=1MHz

* Pulse test : pulse width <300μS, duty cycle < 1%.

HFE GROUPING :	Full range	Group A	Group B
@ IC=2mA VCE=5V	50-460	120-220	180-460
@ IC=10mA VCE=5V	50 min	100 min	160 min
@ IC=100mA VCE=5V	50 min	60 min	90 min

MICRO ELECTRONICS LTD.
38, Hung To Road, Microtron Bulding, Kwun Tong, Kowloon, Hong Kong.
Kwun Tong P.O. Box 69477 Hong Kong. Fax No. 2341 0321 Telex:43510 Micro Hx. Tel: 2343 0181-5

Nov-97