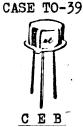


## BC300 BC301 BC302

NPN SILICON AF MEDIUM POWER AMPLIFIERS & SWITCHES

THE BC300, BC301, BC302 ARE NPN SILICON PLANAR EPITAXIAL TRANSISTORS RECOMMENDED FOR AF DRIVERS AND OUTPUTS, AS WELL AS FOR SWITCHING APPLICATIONS UP TO 1 AMPERE. THEY ARE COMPLEMENTARY TO THE PNP TYPE BC303 AND BC304.



ABSOLUTE MAXIMUM RATINGS		BC300	BC301	BC302	
Collector-Base Voltage Collector-Emitter Voltage Emitter-Base Voltage	VCBO VCEO VEBO	120V 80V	9 <b>0v</b> 60 <b>v</b> 7 <b>v</b>	60 <b>v</b> 45 <b>v</b>	
Collector Current Total Power Dissipation (TC≤25°C)	IC Ptot		1 <b>A</b> 6W		
(TA≤25°C) Operating Junction & Storage Temperature	Tj, Tstg	850mW -55 to 175°C			

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMI	ETER	SYMBOL	MIN	TYP	MAX	UNIT	UNIT TEST CONDTIONS	
Collector-Emitter	Breakdown Voltage	TACEO *	80			v	Ic=100mA	IB=O
	BC 301 BC 302		60 45			v v		
Collector-Emitter	Breakdown Voltage BC300 only BC301 only	LVCEV *	120 90	,		v v	IC=100mA	VEB=1.5V
Collector Cutoff Cu	ırrent	ICBO			20	n <b>A</b>	VCB=60V	IE=O
Emitter Cutoff Cur	rent	IEBO			20	nA	VEB=7V	IC=O
Collector-Fmitter	Saturation Voltage	VCE(sat)*		0.1	0.5	V	IC=150mA	IB=15mA
Base-Emitter Volta	ge	VBE *		0.78	1	٧	IC=150mA	VCE=10V
D.C. Current Gain	·	HFE *	20 40 20		240		IC=0.1mA IC=150mA IC=500mA	VCE=10V
D.C. Current Gain	Group 4 Group 5 Group 6	HFE *	40 70 120		80 140 240		IC=150mA	ACE=10A
Current Gain-Bandw	idth Product	fT		120		MHz	IC=10mA	ACE=10A
Collector-Base Cap	acitance	Сор		10		pF	VCB=10V f=1MHz	IE=0

<sup>\*</sup> Pulse Test : Pulse Width=0.3mS, Duty Cycle=1%

## MICRO ELECTRONICS LTD.

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BC300 . BC301 . BC302

## TYPICAL CHARACTERISTICS

