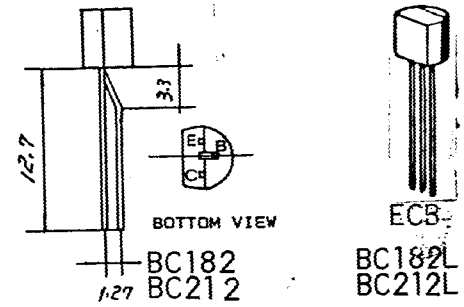


MICRO ELECTRONIC

BC182L
BC212
BC212L

DESCRIPTION

The BC182, BC182L (NPN) & BC212, BC212L (PNP) are complementary silicon planar epitaxial transistors for use in AF small signal amplifiers and drivers, as well as for low power universal applications. Both types feature good linearity of DC current gain.



ABSOLUTE MAXIMUM RATINGS

	BC182, L	BC212, L
Collector-Emitter Voltage	50V	50V
Collector-Base Voltage	60V	60V
Emitter-Base Voltage	6V	5V
Collector Current Continuous		200mA
Total Power Dissipation @ Ta < 25°C		300mW
Operating & Storage Junction Temperature		-55 to +150°C

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

PARAMETER	SYMBOL	BC182, L			BC212, L			UNIT	TEST CONDITIONS
		MIN	TYP	MAX	MIN	TYP	MAX		
Collector-Base Breakdown Voltage	BVCBO	60			60			V	IC=0.01mA IE=0
Collector-Emitter Breakdown Voltage	LVCEO *	50			50			V	IC=2mA IB=0
Emitter-Base Breakdown Voltage	BVEBO	6			5			V	IE=0.01mA IC=0
Collector Cutoff Current	ICBO			15			15	nA	VCB=50V IE=0
							15	nA	VCB=30V IE=0
Emitter Cutoff Current	IEBO			15		15		nA	VEB=4V IC=0
Collector-Emitter Saturation Voltage	VCE(sat) *	0.05	0.25		0.05			V	IC=10mA IB=0.5mA
		0.12	0.6		0.14	0.6		V	IC=100mA IB=5mA
Base-Emitter Saturation Voltage	VBE(sat) *	0.85	1.2		0.85	1.1		V	IC=100mA IB=5mA
Base-Emitter Voltage	VBE *	0.55	0.62	0.7	0.55	0.62	0.7	V	IC=2mA VCE=5V
D.C. Current Gain	hFE *	40			40				IC=10μA VCE=5V
		110		800	60		600		IC=2mA VCE=5V
		80				110			IC=100mA VCE=5V
Small Signal Current Gain	hfe								IC=2mA VCE=5V
Group A		125		260	100		300		f=1kHz
Group B		240		500	200		400		
Group C		450		900	350		600		
Current Gain-Bandwidth Product	fT	150	220		200	300		MHz	IC=10mA VCE=5V
Collector-Base Capacitance	Cob		3.7	5		5		pF	VCB=10V IE=0 f=1MHz
Noise Figure	NF		2	10		1.5	10	dB	IC=0.2mA VCE=5V RG=2KΩ f=1kHz Δf=200Hz

* Pulse Test ; Pulse Width=0.3mS, Duty Cycle=1%

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