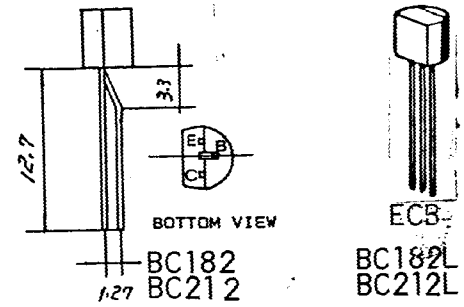


MICRO ELECTRONIC

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	VCEO	50V	50V
Collector-Base Voltage	VCBO	60V	60V
Emitter-Base Voltage	VEBO	6V	5V
Collector Current Continuous	IC		200mA
Total Power Dissipation @ Ta < 25°C	Ptot		300mW
Operating & Storage Junction Temperature	Tj, Tstg		-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	V _{CB0}	60			60			V	I _C =0.01mA I _E =0
Collector-Emitter Breakdown Voltage	V _{CE0} *	50			50			V	I _C =2mA I _B =0
Emitter-Base Breakdown Voltage	V _{EB0}	6			5			V	I _E =0.01mA I _C =0
Collector Cutoff Current	I _{CB0}			15			15	nA	V _{CB} =50V I _E =0
							15	nA	V _{CB} =30V I _E =0
Emitter Cutoff Current	I _{EB0}			15		15		nA	V _{EB} =4V I _C =0
Collector-Emitter Saturation Voltage	V _{CE(sat)} *	0.05	0.25		0.05			V	I _C =10mA I _B =0.5mA
		0.12	0.6		0.14	0.6		V	I _C =100mA I _B =5mA
Base-Emitter Saturation Voltage	V _{BE(sat)} *	0.85	1.2		0.85	1.1		V	I _C =100mA I _B =5mA
Base-Emitter Voltage	V _{BE} *	0.55	0.62	0.7	0.55	0.62	0.7	V	I _C =2mA V _{CE} =5V
D.C. Current Gain	h _{FE} *	40			40				I _C =10μA V _{CE} =5V
		110		800	60		600		I _C =2mA V _{CE} =5V
		80				110			I _C =100mA V _{CE} =5V
Small Signal Current Gain	h _{fe}								I _C =2mA V _{CE} =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	f _T	150	220		200	300		MHz	I _C =10mA V _{CE} =5V
Collector-Base Capacitance	C _{ob}		3.7	5		5		pF	V _{CB} =10V I _E =0
									f=1MHz
Noise Figure	NF		2	10		1.5	10	dB	I _C =0.2mA V _{CE} =5V
									R _G =2KΩ f=1kHz
									Δf=200Hz

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

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