

MPS6520, MPS6521 (NPN) and MPS6522, MPS6523 (PNP) are complementary silicon planar epitaxial transistors designed for general purpose amplifier applications and for complementary circuitry.

ABSOLUTE MAXIMUM RATINGS

		<u>MPS6520, 1</u>	<u>MPS6522, 3</u>
Collector-Base Voltage	V _{CB0}	40V	25V
Collector-Emitter Voltage	V _{CE0}		25V
Emitter-Base Voltage	V _{EB0}		4V
Collector Current	I _C		100mA
Total Power Dissipation @ T _A =25°C T _C =25°C	P _{tot}		350mW 1W
Operating Junction & Storage Temperature	T _j , T _{stg}		-55 to +150°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

PARAMETER	SYMBOL	MIN	MAX	UNIT	TEST CONDITIONS
Collector-Emitter Breakdown Voltage	BV _{CEO}	25		V	I _C =0.5mA I _B =0
Emitter-Base Breakdown Voltage	BV _{EB0}	4		V	I _E =10μA I _C =0
Collector Cutoff Current	I _{CB0}				
	MPS6520, 1		50	nA	V _{CB} =30V I _E =0
	MPS6520, 1		1	μA	V _{CB} =30V T _A =60°C
	MPS6522, 3		50	nA	V _{CB} =20V I _E =0
	MPS6522, 3		1	μA	V _{CB} =20V T _A =60°C
D.C. Current Gain	H _{FE}	100			I _C =100μA V _{CE} =10V
	MPS6521, 3	150			
	MPS6520, 2	200			I _C =2mA V _{CE} =10V
	MPS6521, 3	300			
Collector-Emitter Saturation Voltage	V _{CE(sat)}		0.5	V	I _C =50mA I _B =5mA



MICRO ELECTRONICS LTD. 美科有限公司

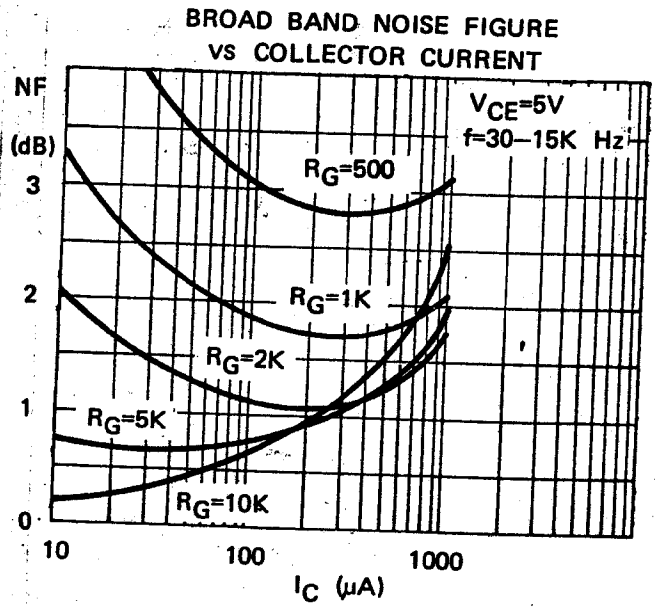
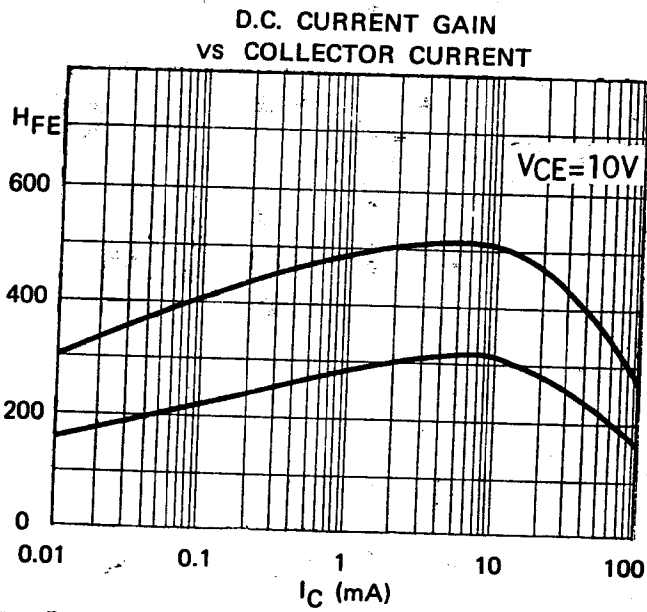
38 Hung To Road, Kwun Tong, Kowloon, Hong Kong. Cable: Microtron, Hong Kong. Telex: 43510 Micro HX.
P.O. Box 9477, Kwun Tong. Tel: 3-430181-6 3-803363, 3-802423, 3-808221

FAX: 3-410321

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

PARAMETER	SYMBOL	TYP	MAX	UNIT	TEST CONDITIONS	
Current Gain-Bandwidth Product	f_T			MHz	$I_C=2\text{mA}$ $V_{CE}=10\text{V}$	
		MPS6520, 1	390			
		MPS6522, 3	340			
		MPS6520, 1	480		$I_C=10\text{mA}$ $V_{CE}=10\text{V}$	
		MPS6522, 3	420			
Output Capacitance	C_{ob}		3.5	pF	$V_{CB}=10\text{V}$ $I_E=0$ $f=1\text{MHz}$	
Noise Figure	NF	1.8	3	dB	$I_C=10\mu\text{A}$ $V_{CE}=5\text{V}$ $R_S=10\text{k}\Omega$ $f=10\text{Hz}$ to 10kHz $BB=15.7\text{kHz}$	

TYPICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)



0.01d 29.00