



MPS-A55 · MPS-A56

COMPLEMENTARY SILICON AF MEDIUM POWER TRANSISTORS

MICRO ELECTRONICS

THE MPS-A05, MPS-A06, MPS-A55, MPS-A56 ARE SILICON PLANAR EPITAXIAL TRANSISTORS FOR AF DRIVERS AND OUTPUTS, AS WELL AS FOR UNIVERSAL APPLICATIONS. THE MPS-A05, MPS-A06 ARE NPN AND ARE COMPLEMENTARY TO THE PNP MPS-A55 AND MPS-A56 RESPECTIVELY.

CASE TO-92A



ABSOLUTE MAXIMUM RATINGS

For p-n-p devices, voltage and current values are negative.

		MPS-A05(NPN) MPS-A55(PNP)	MPS-A06(NPN) MPS-A56(PNP)
Collector-Base Voltage	V_{CBO}	60V	80V
Collector-Emitter Voltage	V_{CEO}	60V	80V
Emitter-Base Voltage	V_{EBO}	4V	
Collector Current	I_C	0.5A	
Collector Peak Current ($t \leq 10\text{ms}$)	I_{CM}	1.5A	
Total Power Dissipation ($T_C \leq 25^\circ\text{C}$) ($T_A \leq 25^\circ\text{C}$)	P_{tot}	1.5W	625mW
Operating Junction & Storage Temperature	T_j, T_{stg}	-55 to 150°C	

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

PARAMETER	SYMBOL	MPS-A05(NPN) MPS-A55(PNP)		MPS-A06(NPN) MPS-A56(PNP)		UNIT	TEST CONDITIONS
		MIN	MAX	MIN	MAX		
Collector-Emitter Breakdown Voltage	$LV_{CEO} *$	60		80		V	$I_C=1\text{mA } I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	4		4		V	$I_E=0.1\text{mA } I_C=0$
Collector Cutoff Current	IC_{BO}		100		100	nA	$V_{CB}=V_{CBO} I_E=0$
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat}) *$		0.25		0.25	V	$I_C=100\text{mA}$ $I_B=10\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE} *$		1.2		1.2	V	$I_C=100\text{mA } V_{CE}=1\text{V}$
D.C. Current Gain	$H_{FE} *$	50		50			$I_C=10\text{mA } V_{CE}=1\text{V}$
		50		50			$I_C=100\text{mA } V_{CE}=1\text{V}$
Current Gain-Bandwidth Product	f_T	50		50		MHz	$I_C=100\text{mA } V_{CE}=1\text{V}$
		100		100		MHz	$I_C=100\text{mA } V_{CE}=2\text{V}$
Collector-Base Capacitance	C_{ob}		20		20	pF	$V_{CB}=10\text{V } I_E=0$ $f=1\text{MHz}$

* Pulse Test : Pulse Width=0.3ms, Duty Cycle=1%

MICRO ELECTRONICS LTD.

38 HUNG TO ROAD, KWUN TONG, HONG KONG. TELEX 43510
KWUN TONG P. O. BOX 69477 CABLE ADDRESS "MICROTRON"
TELEPHONE: 3-430181-6 3-893263, 3-892423

FAX: 3-410321

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

