

SILICON PLANAR EPITAXIAL TRANSISTORS

General purpose p-n-p transistors in TO-92 packages. The complementary types are MPS6513 to MPS6515.

QUICK REFERENCE DATA

		MPS6517	6518	6519
Collector-emitter voltage	$-V_{CEO}$ max.	40	40	25 V
Collector current (d.c.)	$-I_C$ max.	100	100	100 mA
D.C. current gain	$h_{FE} >$	60	90	150
$-I_C = 100 \text{ mA}; -V_{CE} = 10 \text{ V}$				
Total power dissipation up to $T_{amb} = 25^\circ\text{C}$	P_{tot} max.	625		mW

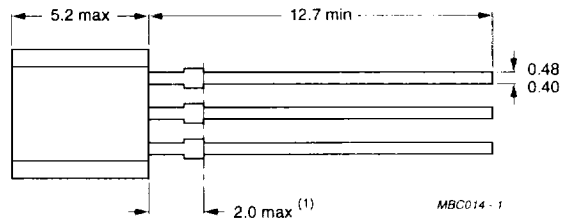
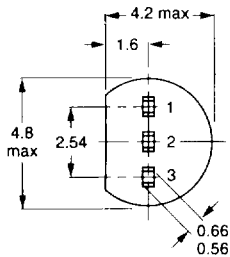
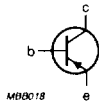
MECHANICAL DATA

Dimensions in mm

Fig. 1 TO-92.

Pinning;

- 1 = collector
- 2 = base
- 3 = emitter



Note (1) Terminal dimensions within this zone are uncontrolled to allow for flow of plastic and terminal irregularities.

RATINGS

Limiting values in accordance with the Absolute Maximum System (IEC 134)

			MPS6517	6518	6519
Collector-emitter voltage	$-V_{CEO}$	max.	40	40	25 V
Collector-base voltage	$-V_{CBO}$	max.	40	40	25 V
Emitter-base voltage	$-V_{EBO}$	max.		4,0	V
Collector current (d.c.)	$-I_C$	max.		100	mA
Total power dissipation up to $T_{amb} = 25\text{ }^\circ\text{C}$	P_{tot}	max.		625	mW
Storage temperature range	T_{stg}			-65 to +150	$^\circ\text{C}$
Junction temperature	T_j	max.		150	$^\circ\text{C}$

THERMAL RESISTANCE

From junction to ambient in free air	$R_{th\ j-a}$	=		200	K/W
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CHARACTERISTICS

$T_j = 25\text{ }^\circ\text{C}$ unless otherwise specified

			MPS6517	6518	6519
Collector-emitter breakdown voltage $-I_C = 0,5\text{ mA}; I_B = 0$	$-V_{(BR)CEO}$	>	40	40	25 V
Emitter-base breakdown voltage $-I_E = 10\text{ }\mu\text{A}; I_C = 0$	$-V_{(BR)EBO}$	>	4,0	4,0	4,0 V
Collector cut-off current $-V_{CB} = 30\text{ V}; I_E = 0$	$-I_{CB0}$	<	50	50	- nA
$-V_{CB} = 20\text{ V}; I_E = 0$	$-I_{CBO}$	<	-	-	50 nA
D.C. current gain $-I_C = 2\text{ mA}; -V_{CE} = 10\text{ V}$	h_{FE}	=	90 to 180	150 to 300	250 to 500
$-I_C = 100\text{ mA}; -V_{CE} = 10\text{ V}$	h_{FE}	>	60	90	150
Collector-emitter saturation voltage $-I_C = 50\text{ mA}; -I_B = 5\text{ mA}$	$-V_{CEsat}$	<		0,5	V
Output capacitance $-V_{CB} = 10\text{ V}; I_E = 0; f = 100\text{ kHz}$	C_c	<		3,5	pF