PHILIPS INTERNATIONAL 56E D 7110826 0042500 801 PHIN

T-27-21

AMPLIFIER TRANSISTOR

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

QUICK REFERENCE DATA

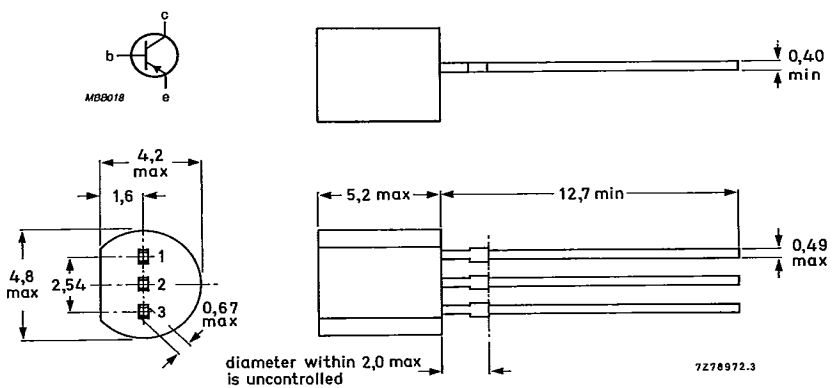
			MPS6517	6518	6519	
Collector-emitter voltage	$-V_{CEO}$	max.	40	40	25	V
Collector current (d.c.)	$-I_C$	max.	100	100	100	mA
D.C. current gain $-I_C$ = 100 mA; $-V_{CE}$ = 10 V	h_{FE}	>	60	90	150	
Total power dissipation up to T_{amb} = 25 °C	P_{tot}	max.		625		mW

MECHANICAL DATA

Dimensions in mm

Fig. 1 TO-92.

Pinning;
1 = collector
2 = base
3 = emitter



Capability approved to CECC NECC-C-002

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 °C	P_{tot}	max.		625		mW
Storage temperature range	T_{stg}			−65 to +150		°C
Junction temperature	T_j	max.		150		°C

THERMAL RESISTANCE

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

CHARACTERISTICS

T_j = 25 °C unless otherwise specified

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