UNA0225 (UN225)

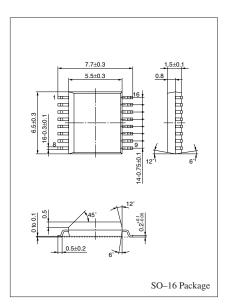
Transistor array to drive the small motor

Features

- Small and lightweight
- Low power consumption (low $V_{CE(sat)}$ transistor used)
- Low-voltage drive
- With 8 elements incorporated (SO–16)

Applications

- Video cameras
- Cameras
- Portable CD players
- Small motor drive circuits in general for electronic equipment.



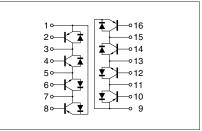
Absolute Maximum Ratings (Ta=25±2°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	±10	V
Collector to emitter voltage	V _{CEO}	±10	V
Emitter to base voltage	V_{EBO}	±7	V
Collector current	I _C	±0.5	А
Total power dissipation	P _T *	0.5	W
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

Note: ± marks used above: +: NPN part, -: PNP part

* $T_C = 25^{\circ}C$ only when the elements are active

Internal Connection

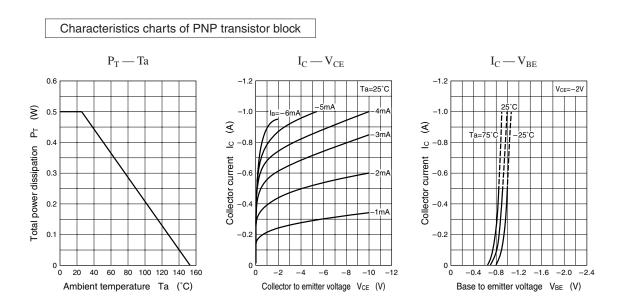


Note.) The Part number in the Parenthesis shows conventional part number.

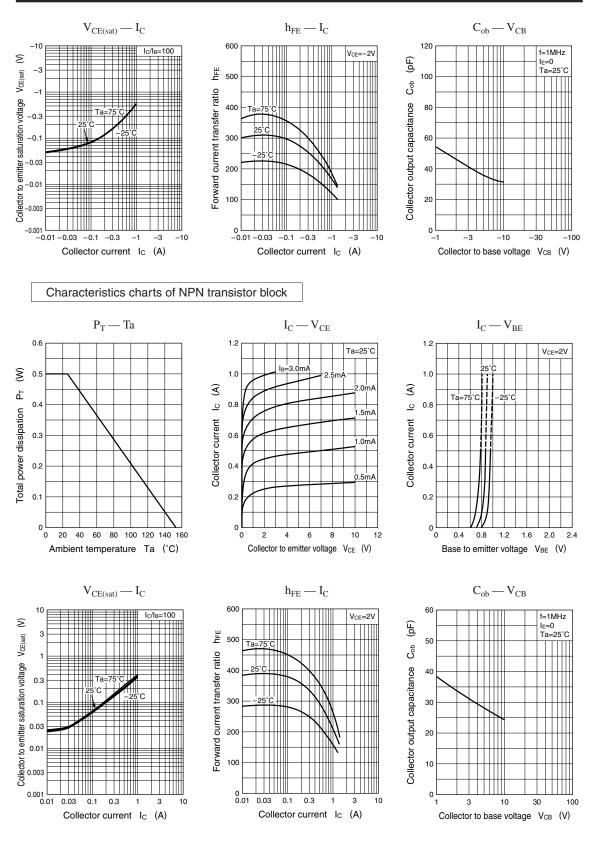
Parameter	Symbol	Conditions	min	typ	max	Unit	
Collector cutoff current	I _{CBO}	(NPN) $V_{CB} = 7V$			1	<u> </u>	
		(PNP) $V_{CB} = -7V$			-1	- μΑ	
Collector to base voltage	V _{CBO}	(NPN) $I_C = 10\mu A$	10			- V	
		(PNP) $I_C = -10\mu A$	-10				
Collector to emitter voltage	V _{CEO}	(NPN) $I_C = 1mA$	10			- V	
		(PNP) $I_C = -1mA$	-10				
Emitter to base voltage	V _{EBO}	(NPN) $I_E = 10\mu A$	7			- V	
		(PNP) $I_E = -10\mu A$	-7				
Forward current transfer ratio	h _{FE}	(NPN) $V_{CE} = 2V, I_C = 0.2A^*$	200		800	_	
		(PNP) $V_{CE} = -2V, I_C = -0.2A^*$	200		800		
Collector to emitter saturation voltage	V _{CE(sat)1}	(NPN) $I_{C} = 0.2A, I_{B} = 2mA$			0.2	- V	
		(PNP) $I_{C} = -0.2A, I_{B} = -2mA$			- 0.2		
Transition frequency	f _T	(NPN) $V_{CB} = 6V, I_E = -50mA, f = 200MHz$		120		MHz	
		(PNP) $V_{CB} = -6V$, $I_E = 50mA$, $f = 200MHz$		120			
Collector output capacitance	C _{ob}	(NPN) $V_{CB} = 6V, I_E = 0, f = 1MHz$		25			
		(PNP) $V_{CB} = -6V$, $I_E = 0$, $f = 1MHz$		35		pF	
Forward voltage (DC)	V _F	(NPN) $I_{\rm F} = 0.5 {\rm A}$			1.3		
		(PNP) $I_{\rm F} = -0.5 {\rm A}$			-1.3	- V	

Electrical Characteristics (Ta=25±2°C)

*Pulse measurement



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