

PNP Silicon Epitaxial Planar Transistors ($I_C=500\text{mA}$) in TO-18 and TO-39 (\approx TO-5) for fast switching and general purpose applications

Common maximum ratings	$-V_{EBO}$ 5V	$-I_C$ 0,5A	$P_{tot}(T_{amb}=25^\circ\text{C})$ 0,6W (TO-5): 0,4W (TO-18)	$P_{tot}(T_{case}=25^\circ\text{C})$ 3W (TO-5): 1,8W (TO-18)	T_J 200°C
Common characteristics	$V_{CE(sat)}$ ($-I_C=150\text{mA}$, $-I_B=15\text{mA}$) 0,4V		f_T ($-V_{CE}=20\text{V}$, $f=100\text{MHz}$) 200MHz	c_{ob} ($-V_{CB}=10\text{V}$) 8pF	

Type	Ratings	Characteristics @ $T_{amb}=25^\circ\text{C}$						
TO-39 case	TO-18 case	$-V_{CBO}$ V	$-V_{CEO}$ V	$-I_{CBO}$ nA	@ $-V_{CB}$ V	h_{21E} @ $-V_{CE}=10\text{V}$ $-I_C=1\text{mA}$	h_{21E} -10mA	h_{21E} -150mA ¹
BSV 42	BSV 46	70	70	20	50	25	35	75 ... 150
BSV 43A	BSV 47A	60	60	20	50	40	40	40 ... 120
BSV 43B	BSV 47B	60	60	20	50	100	100	100 ... 300
BSV 44A	BSV 48A	60	40	20	50	25	35	40 ... 120
BSV 44B	BSV 48B	60	40	20	50	50	75	100 ... 300
BSV 45A	BSV 49A	30	30	25	20	25	35	40 ... 120
BSV 45B	BSV 49B	30	30	25	20	50	75	100 ... 300

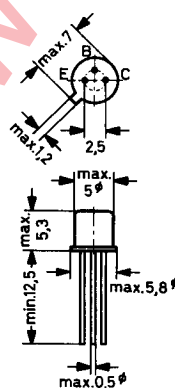
¹ Pulsed

PNP Silicon Epitaxial Planar Transistors ($I_C=1\text{A}$) in TO-39 (\approx TO-5)

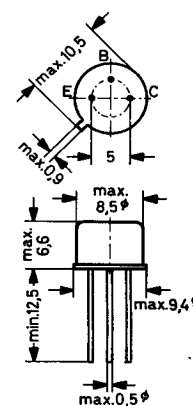
Type	Maximum ratings							Characteristics at $T_{amb} = 25^\circ\text{C}$		
	$-V_{CBO}$ V	$-V_{CEO}$ V	$-V_{EBO}$ V	$-I_C$ A	P_{tot} W	P_{tot} W	T_J °C	$\theta_{case} (\theta_{amb})$ °C/W	$-I_{CBO}$ nA	@ $-V_{CB}$ V
2 N 4030	60	60	5	1	0,8	4	200	< 44 (< 220)	< 50	50
2 N 4031	80	80	5	1	0,8	4	200	< 44 (< 220)	< 50	60
2 N 4032	60	60	5	1	0,8	4	200	< 44 (< 220)	< 50	50
2 N 4033	80	80	5	1	0,8	4	200	< 44 (< 220)	< 50	60

Type	Characteristics at $T_{amb} = 25^\circ\text{C}$							
	@ $-V_{CE} = 5\text{V}$ $-I_C = 0,1\text{mA}$	$-I_C = 100\text{mA}$	$-I_C = 0,5\text{A}$	$-I_C = 1\text{A}$	$-V_{CE(sat)}$ V	@ $-I_C = 1\text{A}$ $-I_B = 0,1\text{A}$	f_T MHz	C_{22b} pF
2 N 4030	$h_{21E} > 30$	$h_{21E} 40 \dots 120$	$h_{21E} > 25$	$h_{21E} > 15$	< 1	> 100	< 20	
2 N 4031	$h_{21E} > 30$	$h_{21E} 40 \dots 120$	$h_{21E} > 25$	$h_{21E} > 10$	< 0,5	> 100	< 20	
2 N 4032	$h_{21E} > 75$	$h_{21E} 100 \dots 300$	$h_{21E} > 70$	$h_{21E} > 40$	< 1	> 150	< 20	
2 N 4033	$h_{21E} > 75$	$h_{21E} 100 \dots 300$	$h_{21E} > 70$	$h_{21E} > 25$	< 0,5	> 150	< 20	

TO-18 metal case
Weight 0,35p
Collector connected to case



TO-39 (\approx TO-5) metal case
Weight 1p
Collector connector to case



Dimensions in mm