

PNP 2N5322 – 2N5323

SILICON PLANAR EPITAXIAL TRANSISTORS

The 2N5322 and 2N5323 are PNP transistors mounted in TO-39 metal case . They are especially intended for high-voltage medium power applications in industrial and commercial equipments.

Compliance to RoHS

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value	Unit		
V_{CEO}	Collector-Emitter Voltage ($I_B = 0$)	2N5322	-75	V	
		2N5323	-50		
V_{CBO}	Collector-Base Voltage ($I_E = 0$)	2N5322	-100	V	
		2N5323	-75		
V_{CEV}	Collector-Emitter Voltage ($V_{BE} = 1.5V$)	2N5322	-100	V	
		2N5323	-75		
V_{EBO}	Emitter-Base Voltage ($I_C = 0$)	2N5322	-6	V	
		2N5323	-5		
I_C	Collector Current	2N5322	-2	A	
		2N5323	-2		
I_B	Base Current	2N5322	-1	A	
		2N5323	-1		
P_D	Total Power Dissipation	@ $T_{amb} = 25^\circ$	2N5322	Watts	
			2N5323		
		@ $T_{case} = 25^\circ$	2N5322		10
			2N5323		
T_J	Junction Temperature	2N5322	-65 to +200	$^\circ C$	
		2N5323			
T_{Stg}	Storage Temperature range	2N5322	-65 to +200	$^\circ C$	
		2N5323			

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit	
R_{thJ-a}	Thermal Resistance, Junction to ambient	2N5322	175	$^\circ C/W$
		2N5323		
R_{thJ-c}	Thermal Resistance, Junction to case	2N5322	17.5	$^\circ C/W$
		2N5323		

PNP 2N5322 – 2N5323

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

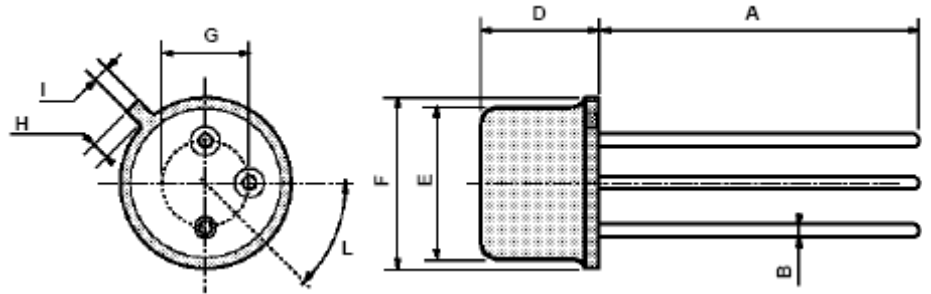
Symbol	Ratings	Test Condition(s)	Min	Typ	Mx	Unit	
I_{CBO}	Collector Cutoff Current	$V_{CB} = -80\text{ V}, I_E = 0$	2N5322	-	-	-0.5	μA
		$V_{CB} = -60\text{ V}, I_E = 0$	2N5323	-	-	-5	
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{ V}, I_C = 0$	2N5322	-	-0.1	-	μA
		$V_{EB} = -4\text{ V}, I_C = 0$	2N5323	-	-0.5	-	
V_{CEO}	Collector Emitter Breakdown Voltage	$I_C = -10\text{ mA}, I_B = 0$	2N5322	-75	-	-	V
			2N5323	-50	-	-	
V_{CEV}	Collector Emitter Breakdown Voltage	$I_C = -100\text{ }\mu\text{A}$ $V_{BE} = 1.5\text{ V}$	2N5322	-100	-	-	V
			2N5323	-75	-	-	
V_{EBO}	Emitter Base Breakdown Voltage	$I_E = -100\text{ }\mu\text{A}, I_C = 0$	2N5322	-6	-	-	V
			2N5323	-5	-	-	
$h_{FE} (1)$	DC Current Gain	$I_C = -500\text{ mA}$ $V_{CE} = -4\text{ V}$	2N5322	30	-	130	-
			2N5323	40	-	250	
		2N5322	10	-	-		
$V_{CE(SAT)} (1)$	Collector-Emitter saturation Voltage	$I_C = -500\text{ mA}, I_B = -50\text{ mA}$	2N5322	-	-	-0.7	V
			2N5323	-	-	-1.2	
$V_{BE} (1)$	Base-Emitter Voltage	$I_C = -500\text{ mA}, V_{CE} = -4\text{ V}$	2N5322	-	-	-1.1	V
			2N5323	-	-	-1.4	
f_T	Transition frequency	$I_C = -50\text{ mA}, V_{CE} = -4\text{ V}$ $f = 10\text{ MHz}$	2N5322	50	-	-	MHz
			2N5323				
t_{on}	Turn-on Time	$I_C = -500\text{ mA}, V_{CC} = -30\text{ V}$ $I_{B1} = -50\text{ mA}$	2N5322	-	-	100	ns
			2N5323				
t_{off}	Turn-off Time	$I_C = 500\text{ mA}, V_{CC} = 30\text{ V}$ $I_{B1} = -I_{B2} = -50\text{ mA}$	2N5322	-	-	1000	ns
			2N5323				

(1) Pulse conditions : $t_p < 300\text{ }\mu\text{s}, \delta = 1\%$

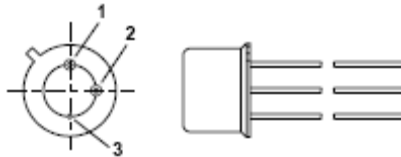
PNP 2N5322 – 2N5323

MECHANICAL DATA CASE TO-39

DIMENSIONS (mm)			
	min	typ	max
A	12.7	-	-
B	-	-	0.49
D	-	-	6.6
E	-	-	8.5
F	-	-	9.4
G	5.08	-	-
H	-	-	1.2
I	-	-	0.9
L	45°	-	-



Pin 1 :	Emitter
Pin 2 :	Base
Case :	Collector



Information furnished is believed to be accurate and reliable. However, CS assumes no responsibility for the consequences of use of such information nor for errors that could appear.
Data are subject to change without notice.