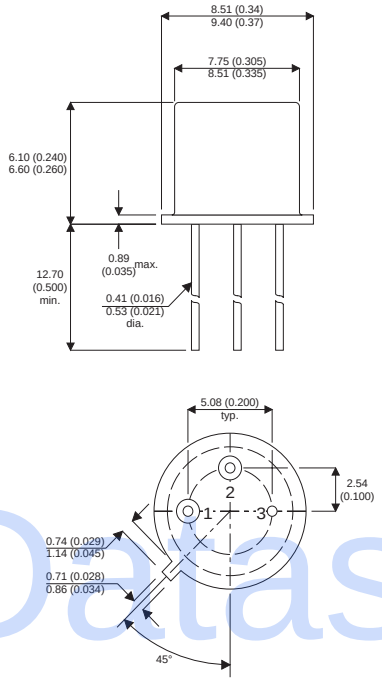
2N5322
2N5323

MECHANICAL DATA
Dimensions in mm (inches)



TO-39 (TO-205AD)

Pin 1 – Emitter Pin 2 – Base Pin 3 – Collector

HIGH SPEED MEDIUM VOLTAGE SWITCHES

DESCRIPTION

The 2N5322 and 2N5323 are silicon planar epitaxial PNP transistors in jedec TO-39 metal case intended for high voltage medium power applications in industrial and commercial equipment.

The complementary NPN types are the 2N5320 and 2N5321 respectively

ABSOLUTE MAXIMUM RATINGS

T_{CASE} = 25°c unless otherwise stated		2N5322	2N5323
V_{CBO}	Collector – Base Voltage (I_E = 0)	-100V	-75V
V_{CEV}	Collector – Emitter Voltage (V_{BE} = 1.5v)	-100V	-75V
V_{CEO}	Emitter – Base Voltage (I_B = 0)	-75V	-50V
V_{EBO}	Emitter – Base Voltage (I_C = 0)	-6V	-5V
I_C	Continuous Collector Current	-1.2A	
I_B	Base Current	-1A	
P_{tot}	Total Dissipation at T_{amb} = 25°C	1W	
	T_{case} = 50°C	10W	
T_{stg}, T_j	Storage and Junction temperature	–65 to +200°C	

THERMAL DATA

$R_{thj\text{-}case}$	Thermal Resistance Junction-Case	Max	17.5	°C/W
$R_{thj\text{-}amb}$	Thermal Resistance Junction-Ambient	Max	175	°C/W

Semelab plc. Telephone +44(0)1455) 556565. Fax +44(0)1455) 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

Document Number 3073
Issue 2

2N5322
2N5323

ELECTRICAL CHARACTERISTICS FOR (T_{case} = 25°C unless otherwise stated)

	Parameter	Test Conditions			Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut Off Current	V_{CB} = -80V	I_E = 0	**2N5322**			-0.5	µA
		V_{CB} = -60V	I_E = 0	**2N5323**			-5	
I_{EBO}	Emitter Cut Off Current	V_{EB} = -5V	I_C = 0	**2N5322**		-0.1		µA
		V_{EB} = -4V	I_C = 0	**2N5323**		-0.5		
$V_{(BR)CEV}$	Collector Emitter Breakdown Voltage	V_{BE} = 1.5V	I_C = -0.1mA	**2N5322**	-100			V
				2N5323	-75			
$V_{(BR)CEO*}$	Collector-Emitter Breakdown Voltage	I_C = -10mA	I_B = 0	**2N5322**	-75			V
				2N5323	-50			
$V_{(BR)EBO}$	Emitter Base Breakdown Voltage	I_E = -0.1mA	I_C = 0	**2N5322**	-6			V
				2N5323	-5			
$V_{CE(sat)*}$	Collector Emitter Saturation Voltage	I_C = -500mA	I_B = -50mA	**2N5322**			-0.7	V
				2N5323			-1.2	
V_{BE*}	Base Emitter Voltage	I_C = -500mA	V_{CE} = -4V	**2N5322**			-1.1	V
				2N5323			-1.4	
h_{FE*}	DC Current Gain	I_C = -500mA	V_{CE} = -4V		30		130	—
		I_C = -1A	V_{CE} = -2V	**2N5322**	10			
		I_C = -500mA	V_{CE} = -4V	**2N5323**	40		250	
f_T	Transistion Frequency	I_C = -50mA	V_{CE} = -4V		50			MHz
t_{on}	Turn-On Time	I_C = -500mA	V_{CC} = -30V				100	ns
		I_{B1} = -50mA						
t_{off}	Turn Off Time	I_C = -500mA	V_{CC} = -30V				1000	
		I_{B1}=-I_{B2} = -50mA						

* Pulse test t_p = 300µs , δ = 1 %

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