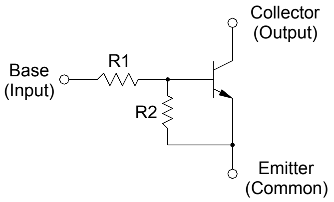
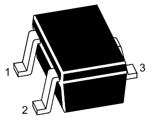
MMDTC234W

NPN Silicon Epitaxial Planar Digital Transistor

Resistance Values

R1 (KΩ)	R2 (KΩ)
2.2	10





1.Base 2.Emitter 3.Collector
SOT-323 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Emitter Voltage	V_{CEO}	50	V
Input Voltage	V_I	- 5 to + 12	V
Collector Current	I_C	100	mA
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V_{CE} = 5 V, I_C = 10 mA	h_{FE}	33	-	-	-
Collector Base Cutoff Current at V_{CB} = 50 V	I_{CBO}	-	-	0.5	μA
Emitter Base Cutoff Current at V_{EB} = 5 V	I_{EBO}	-	-	3.8	mA
Collector Emitter Saturation Voltage at I_C = 10 mA, I_B = 0.5 mA	V_{CEsat}	-	-	0.3	V
Input Off Voltage at V_{CE} = 5 V, I_C = 100 μA	$V_{I(off)}$	0.3	-	-	V
Input On Voltage at V_{CE} = 0.3 V, I_C = 20 mA	$V_{I(on)}$	-	-	3	V
Input Resistance	R1	1.54	2.2	2.86	KΩ
Resistance Ratio	R2/R1	3.6	4.5	5.5	-
Transition Frequency [1] at V_{CE} = 10 V, $-I_E$ = 5 mA, f = 100 MHz	f_T	-	250	-	MHz

[1] Characteristics of built-in transistor.