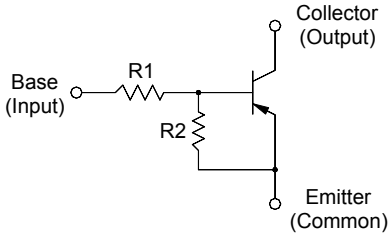
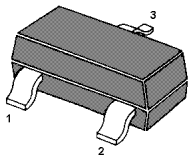
MMDT5P333

PNP Silicon Epitaxial Planar Transistor

for switching and interface circuit and drive circuit applications





1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	V_{EBO}	- 20, 6	V
Collector Current	$-I_C$	500	mA
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, $-I_C$ = 50 mA	h_{FE}	56	-	-	-
Collector Base Cutoff Current at $-V_{CB}$ = 50 V	$-I_{CBO}$	-	-	0.1	µA
Base Emitter Current at $-V_{BE}$ = 5 V	$-I_{BE}$	-	-	2.4	mA
Collector Emitter Saturation Voltage at $-I_C$ = 50 mA, $-I_B$ = 2.5 mA	$-V_{CE(sat)}$	-	-	0.3	V
Input On Voltage at $-V_{CE}$ = 0.3 V, $-I_C$ = 20 mA	$-V_{I(on)}$	-	-	2	V
Input Off Voltage at $-V_{CE}$ = 5 V, $-I_C$ = 100 µA	$-V_{I(off)}$	0.3	-	-	V
Input Resistor	R_1	2.31	3.3	4.29	KΩ
Input Resistor	R_2	7.5	10	12.5	KΩ
Resistance Ratio	R_2 / R_1	2.4	3	3.7	-
Transition Frequency at V_{CE} = 10 V, $-I_E$ = 5 mA, f = 100 MHz	f_T	-	200	-	MHz