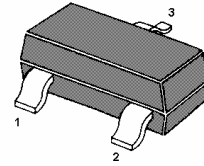


for switching and AF amplifier applications

As complementary types the NPN transistor MMBT9014 is recommended.



1.BASE 2.EMITTER 3.COLLECTOR
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	-V _{CBO}	50	V
Collector Emitter Voltage	-V _{CEO}	45	V
Emitter Base Voltage	-V _{EBO}	5	V
Collector Current	-I _C	100	mA
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _s	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at -V _{CE} = 5 V, -I _C = 1 mA	MMBT9015B h _{FE}	125	250	-
	MMBT9015C h _{FE}	220	475	-
	MMBT9015D h _{FE}	420	800	-
Collector Cutoff Current at -V _{CB} = 50 V	-I _{CBO}	-	50	nA
Emitter Cutoff Current at -V _{EB} = 5 V	-I _{EBO}	-	50	nA
Collector Base Breakdown Voltage at -I _C = 100 μA	-V _{(BR)CBO}	50	-	V
Collector Emitter Breakdown Voltage at -I _C = 1 mA	-V _{(BR)CEO}	45	-	V
Emitter Base Breakdown Voltage at -I _E = 100 μA	-V _{(BR)EBO}	5	-	V
Collector Emitter Saturation Voltage at -I _C = 100 mA, -I _B = 5 mA	-V _{CE(sat)}	-	0.65	V
Base Emitter Saturation Voltage at -I _C = 100 mA, -I _B = 5 mA	-V _{BE(sat)}	-	1	V
Gain Bandwidth Product at -V _{CE} = 5 V, -I _C = 10 mA	f _T	100	-	MHz
Output Capacitance at -V _{CB} = 10 V, f = 1 MHz	C _{OB}	-	7	pF
Noise Figure at -V _{CE} = 5 V, -I _C = 200 μA, f = 1 KHz, R _G = 2 KΩ	NF	-	10	dB