

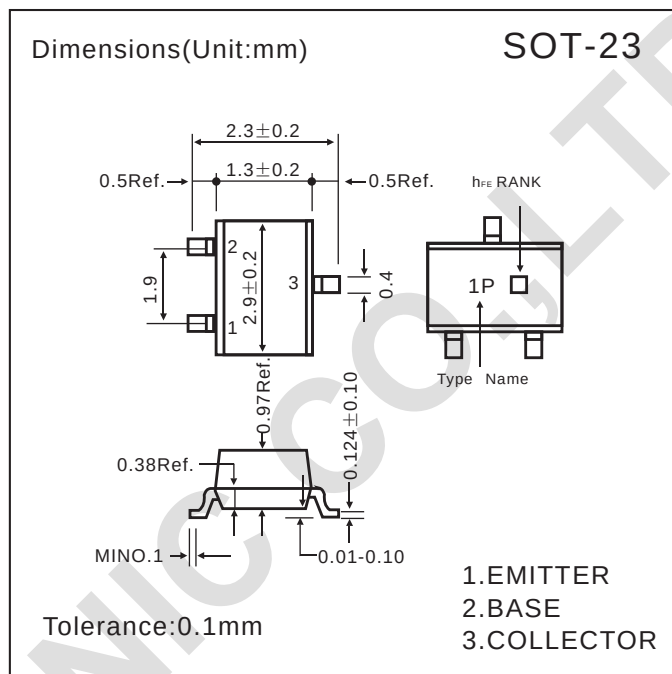
SOT-23 TRANSISTOR

Description

- Medium Power Amplifier.
- NPN Silicon Transistor.

Features

- Large collector current: $I_{Cmax}=600mA$
- Low collector saturation voltage enabling low voltage operation
- Complementary pair with .



Absolute Maximum Ratings

(Ta=25°C)

Parameter		Symbol	Limit	Unit
Collector-Base Voltage		V_{CBO}	60	V
Collector-Emitter Voltage	MMBT2222S	V_{CEO}	30	V
	MMBT2222AS		40	
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	600	mA
Collector Dissipation		P_C	150	mW
Junction Temperature		T_J	150	°C
Storage Temperature		T_{stg}	-50~150	°C

Electrical Characteristics

(Ta=25°C)

Parameter		Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Emitter Breakdown Voltage	MMBT2222S	BV_{CEO}	30			V	$I_C=10mA$
	MMBT2222AS		40				
Collector-Base Breakdown Voltage		BV_{CBO}	60			V	$I_C=10\mu A$
Emitter-Base Breakdown Voltage		BV_{EBO}	5			V	$I_E=10\mu A$
Collector Cut-off Current		I_{CBO}			10	nA	$V_{CB}=60V$
DC Current Gain		h_{FE}	75				$V_{CE}=10V, I_C=10mA$
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$			0.4	V	$I_C=150mA, I_B=15mA$
Current Gain-Bandwidth Product		f_T	250			MHz	$V_{CE}=20V, I_C=20mA, f=100MHz$
Collector Output Capacitance		C_{ob}		6.0		pF	$V_{CB}=10V, I_E=0, f=1MHz$

Typical Characteristics

