

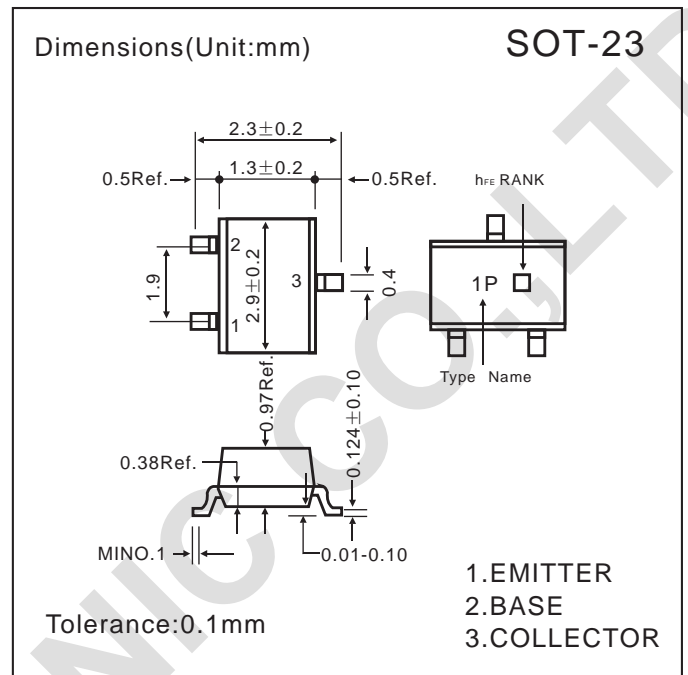
## SOT-23 TRANSISTOR

### 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	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	$BV_{CEO}$	30			V	$I_c=10mA$
		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

