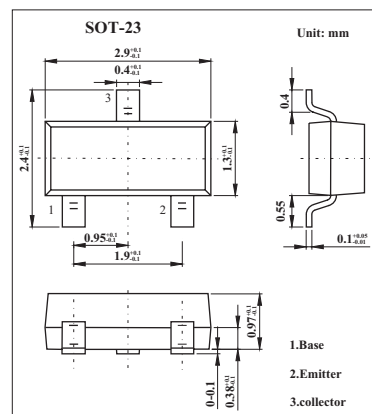


## Silicon Pnp Epitaxial Planar Type

## 2SA1245

## ■ Features

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■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-15	V
Collector-Emitter Voltage	$V_{CE0}$	-8	V
Emitter-Base Voltage	$V_{EB0}$	-2	V
Collector Current	$I_C$	-30	mA
Base Current	$I_B$	-15	mA
Collector Power Dissipation	$P_C$	150	Mw
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 125	$^\circ\text{C}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cut-off Current	$I_{CB0}$	$V_{CB}=-5V; I_E=0$			-0.1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EB0}$	$V_{EB}=-1V; I_C=0$			-0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=-5V; I_C=-10\text{mA}$	20			
Output Capacitance	$C_{ob}$	$V_{CB}=-5V; I_E=0; f=1\text{MHz}$		0.75		pF
Reserve Transfer Capacitance	$C_{re}$			0.60		pF
Transition Frequency	$F_t$	$V_{CE}=-5V; I_C=-10\text{mA}$		4		GHz
Insertion Gain	$ S_{21e} ^2(1)$	$V_{CE}=-5V; I_C=-10\text{mA}; f=500\text{MHz}$		14		dB
	$ S_{21e} ^2(2)$	$V_{CE}=-5V; I_C=-10\text{mA}; f=1\text{GHz}$		9.5		dB
Noise Figure	NF(1)	$V_{CE}=-5V; I_C=-3\text{mA}; f=500\text{MHz}$		2.5		dB
	NF(2)	$V_{CE}=-5V; I_C=-3\text{mA}; f=1\text{GHz}$		3.0		dB

## ■ Marking

Marking	MD