

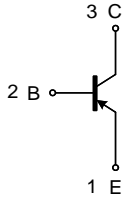
General Purpose Amplifier

PNP - 40V, - 0.5A

Features

Collector current to 500mA

Schematic Diagram



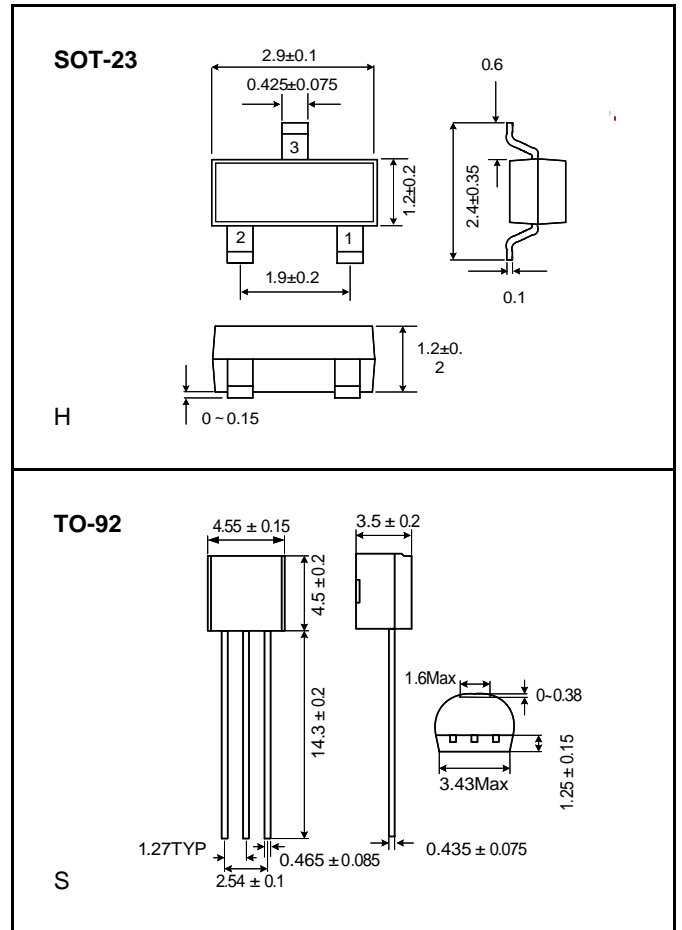
Ordering Information

Type	Package	Pin 1,2,3	Mark	Shipping
2SA205H	SOT-23	E, B, C	TA5	3kpcs/Reel&Tape
2SA205S	TO-92	E, B, C	TA5	3kpcs/Reel&Tape

Maximum ratings (Ta = 25 )

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	$V_{CBO}$	-40	V
Collector-Emitter Voltage	$V_{CEO}$	-40	V
Emitter-Base Voltage	$V_{EBO}$	-5.0	V
Collector Current	$I_C$	-500	mA
Collector power dissipation	$P_C$	350 625	mW
Junction Temperature	$T_j$	150	
Storage Temperature	$T_{stg}$	-55 to+150	

Units: mm



Electrical characteristics (Ta = 25 )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	$V_{CBO}$	-40			V	$I_C=0.1mA, I_E=0$
Collector-emitter breakdown voltage	$V_{CEO}$	-40			V	$I_C=1.0mA, I_B=0$
Emitter-base breakdown voltage	$V_{EBO}$	-5.0			V	$I_E=0.1A, I_C=0$
Collector cutoff current	$I_{CBO}$			-0.1	$\mu A$	$V_{CE}=35V, V_{BE}=0.4V$
Emitter cutoff current	$I_{BEX}$			-0.1	$\mu A$	$V_{CE}=35V, V_{EB}=0.4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$			-0.75	V	$I_C=-500mA, I_B=-50mA$
DC current transfer ratio	$h_{FE}$	90		365		$I_C=-150mA, V_{CE}=-2.0V$
Transition frequency	$f_T$	200			MHz	$I_E=50mA, V_{CE}=-20V, f=100MHz$
Output capacitance	$C_{ob}$			8.5	pF	$V_{CB}=10V, I_E=0, f=140kHz$