

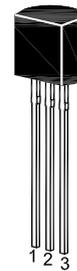
# 2SA1175

## PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into six groups, R, J, H, F, E and K according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



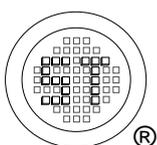
1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	100	mA
Base Current	$-I_B$	20	mA
Power Dissipation	$P_{tot}$	250	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit	
DC Current Gain at $-V_{CE} = 6\text{ V}$ , $-I_C = 2\text{ mA}$ Current Gain Group	R	$h_{FE}$	110	180	-
	J	$h_{FE}$	135	220	-
	H	$h_{FE}$	170	270	-
	F	$h_{FE}$	200	320	-
	E	$h_{FE}$	250	400	-
	K	$h_{FE}$	300	600	-
Collector Base Cutoff Current at $-V_{CB} = 60\text{ V}$	$-I_{CBO}$	-	100	nA	
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	100	nA	
Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$	$-V_{CE(sat)}$	-	0.3	V	
Gain Bandwidth Product at $-V_{CE} = 6\text{ V}$ , $-I_E = 1\text{ mA}$	$f_T$	50	-	MHz	
Output Capacitance at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	6	pF	



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 ISO14001 : 2004 Certificate No. 7116  
 ISO 9001 : 2008 Certificate No. 5073410  
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 IECQ QC 080000 Certificate No. PSC-18P4-1481