

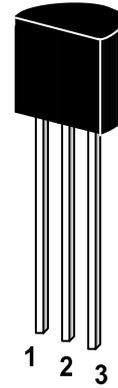
ST 2SC1674

NPN Silicon Epitaxial Planar Transistor

TV PIF amplifier, FM tuner RF amplifier.

The transistor is subdivided into three groups, R, O, and Y, according to its DC current gain

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

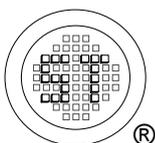


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_{C}	20	mA
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_{j}	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{s}	-55 to +150	$^{\circ}\text{C}$



SEMTECH ELECTRONICS LTD.

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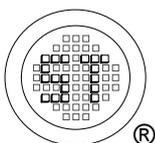


Dated : 07/12/2002

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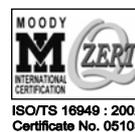
Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$	Current Gain Group R	h_{FE}	40	-	80	-
	O	h_{FE}	70	-	140	-
	Y	h_{FE}	120	-	240	-
Collector Base Breakdown Voltage at $I_C=10\mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V	
Collector Emitter Breakdown Voltage at $I_C=5\text{mA}$	$V_{(BR)CEO}$	20	-	-	V	
Emitter Base Breakdown Voltage at $I_E=10\mu\text{A}$	$V_{(BR)EBO}$	4	-	-	V	
Collector Cutoff Current at $V_{CB}=30\text{V}$	I_{CBO}	-	-	0.1	μA	
Emitter Cutoff Current at $V_{EB}=4\text{V}$	I_{EBO}	-	-	0.1	μA	
Collector Saturation Voltage at $I_C=10\text{mA}$, $I_B=1\text{mA}$	$V_{CE(sat)}$	-	0.1	0.3	V	
Base Emitter On Voltage at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$	$V_{BE(on)}$	-	0.72	-	V	
Gain Bandwidth Product at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$	f_T	400	600	-	MHz	
Output Capacitance at $V_{CB}=6\text{V}$, $f=1\text{MHz}$	C_{OB}	-	1.2	-	pF	
Common Source Noise Figure at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_E=1\text{mA}$, $R_S=50\Omega$	NF	-	3	5	dB	
Power Gain at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_E=1\text{mA}$, $R_S=50\Omega$	G_{pe}	18	22	-	dB	



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