

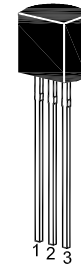
# ST 2SD655

## NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into three groups, D, E and F, according to its DC current gain.

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



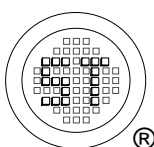
1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	30	V
Collector Emitter Voltage	$V_{CEO}$	15	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	700	mA
Collector Peak Current	$I_{CP}$	1000	mA
Power Dissipation	$P_{tot}$	500	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.	Typ.	Max.	Unit		
DC Current Gain at $V_{CE} = 1\text{ V}$ , $I_C = 150\text{ mA}$	Current Gain Group	D	$h_{FE}$	250	-	500	-
			$h_{FE}$	400	-	800	-
			$h_{FE}$	600	-	1200	-
			$h_{FE}$	600	-	1200	-
Collector Base Cutoff Current at $V_{CB} = 20\text{ V}$	$I_{CBO}$	-	-	1	$\mu\text{A}$		
Collector to Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V		
Collector to Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	15	-	-	V		
Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V		
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$ , $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	0.15	0.5	V		
Base Emitter Voltage at $V_{CE} = 1\text{ V}$ , $I_C = 150\text{ mA}$	$V_{BE}$	-	-	1	V		
Gain Bandwidth Product at $V_{CE} = 1\text{ V}$ , $I_C = 150\text{ mA}$	$f_T$	-	250	-	MHz		



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