

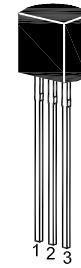
2SD655

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.



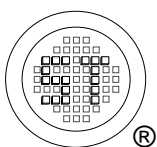
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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	-
	E	h_{FE}	400	-	800	-
	F	h_{FE}	600	-	1200	-
Collector Base Cutoff Current at $V_{CB} = 20\text{ V}$	I_{CBO}	-	-	1	μA	
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	



SEMTECH ELECTRONICS LTD.



ISO/TS 16949 : 2009
Certificate No. 160713000



ISO14001 : 2004
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ISO 9001 : 2008
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