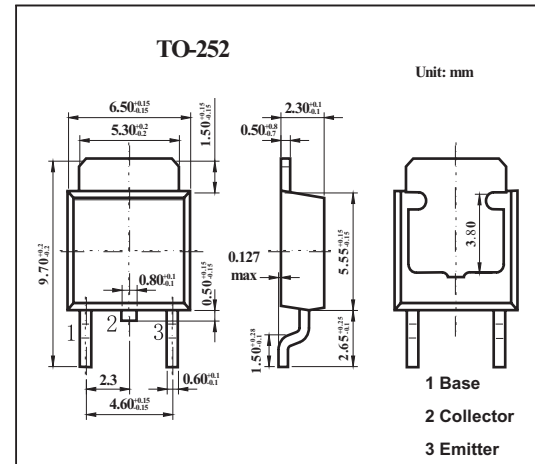


Silicon NPN Epitaxial

2SD2115S

■ Features

- Low frequency power amplifier.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	150	V
Collector to emitter voltage	V_{CE0}	60	V
Emitter to base voltage	V_{EB0}	5	V
Collector current	I_C	2	A
Peak collector current	I_{CP}	2.5	A
Collector power dissipation	P_C	18	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = 1\text{ mA}, I_E = 0$	150			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, R_{BE} = \infty$	60			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1\text{ mA}, I_C = 0$	5			V
Collector cutoff current	I_{CBO}	$V_{CB} = 100\text{ V}, I_E = 0$			10	μA
DC current transfer ratio	h_{FE}	$V_{CE} = 5\text{ V}, I_C = 1.5\text{ A}$	150			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1.5\text{ A}, I_B = 0.05\text{ A}$			0.8	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 1.5\text{ A}, I_B = 0.05\text{ A}$			1.3	V
Fall time	t_f	$I_C = 1.5\text{ A}, I_B = -I_{B2} = 50\text{ mA}$			0.6	μs