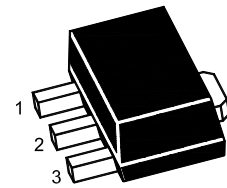


ST 2SA1663U

PNP Silicon Epitaxial Planar Transistor

for high current application



1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

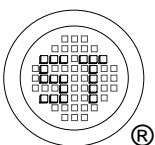
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	30	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	30	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	1.5	A
Base Current	$-I_{\text{B}}$	0.3	A
Total Power Dissipation	P_{tot}	0.5 1 ¹⁾	W
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾ When mounted on a 250 mm² X 0.8 t ceramic substrate.

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{\text{CE}} = 2\text{ V}$, $-I_{\text{C}} = 500\text{ mA}$	Current Gain Group O	h_{FE}	100	-	200	-
	Y	h_{FE}	160	-	320	-
Collector Base Breakdown Voltage at $-I_{\text{C}} = 1\text{ mA}$	$-V_{(\text{BR})\text{CBO}}$	30	-	-	V	
Collector Emitter Breakdown Voltage at $-I_{\text{C}} = 10\text{ mA}$	$-V_{(\text{BR})\text{CEO}}$	30	-	-	V	
Emitter Base Breakdown Voltage at $-I_{\text{E}} = 1\text{ mA}$	$-V_{(\text{BR})\text{EBO}}$	5	-	-	V	
Collector Cutoff Current at $-V_{\text{CB}} = 30\text{ V}$	$-I_{\text{CBO}}$	-	-	100	nA	
Emitter Cutoff Current at $-V_{\text{EB}} = 5\text{ V}$	$-I_{\text{EBO}}$	-	-	100	nA	
Collector Emitter Saturation Voltage at $-I_{\text{C}} = 1.5\text{ A}$, $-I_{\text{B}} = 30\text{ mA}$	$-V_{\text{CE}(\text{sat})}$	-	-	2	V	
Base Emitter Voltage at $-V_{\text{CE}} = 2\text{ V}$, $-I_{\text{C}} = 500\text{ mA}$	$-V_{\text{BE}}$	-	-	1	V	
Transition Frequency at $-V_{\text{CE}} = 2\text{ V}$, $-I_{\text{C}} = 500\text{ mA}$	f_{T}	-	120	-	MHz	
Collector Output Capacitance at $-V_{\text{CB}} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	-	50	pF	



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ISO 14001:2004
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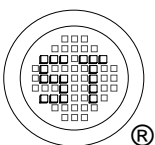
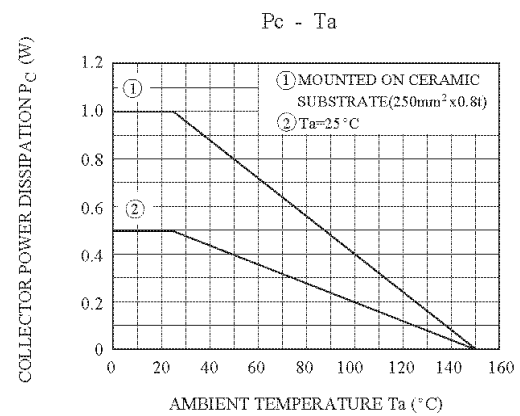
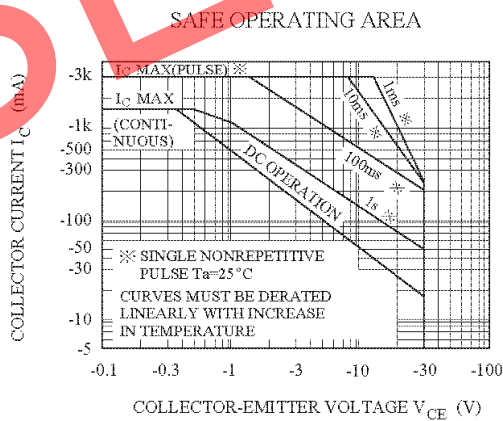
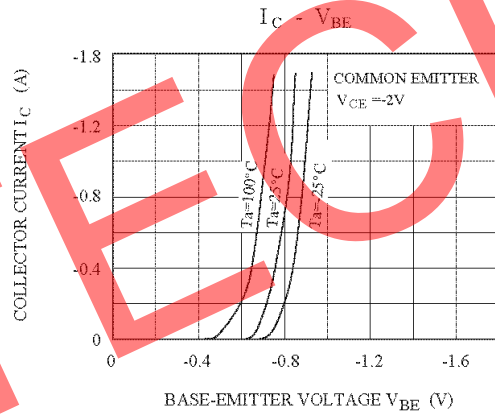
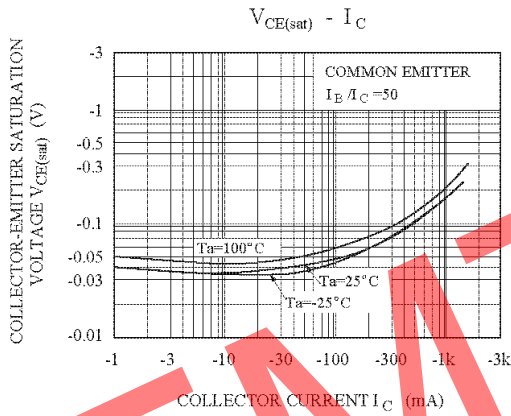
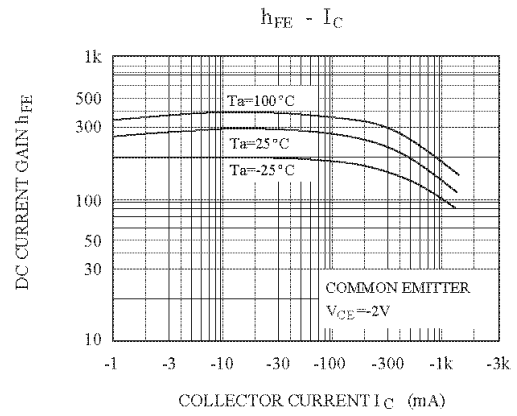
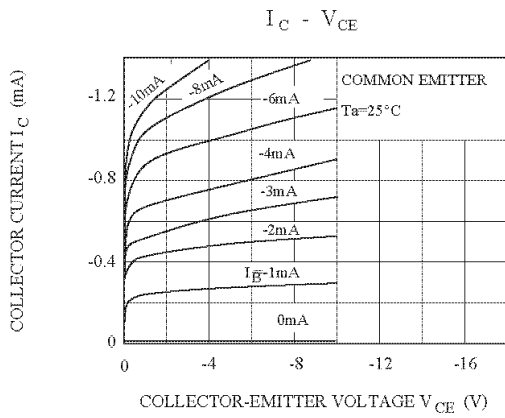


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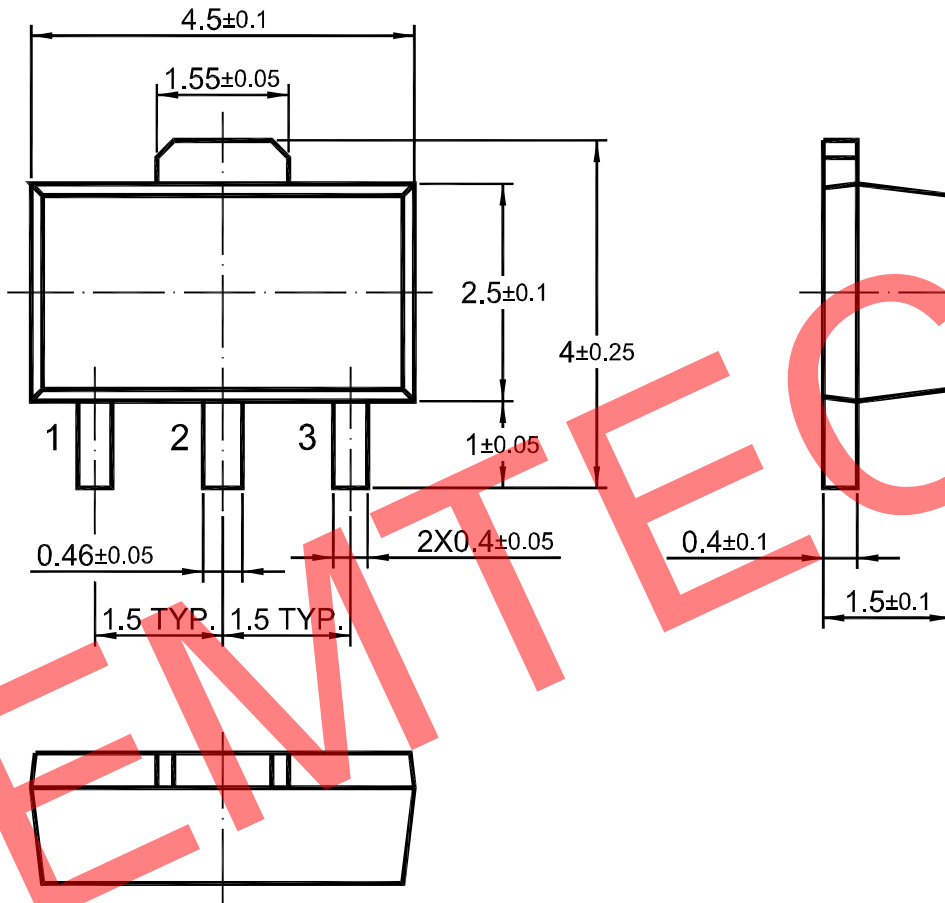
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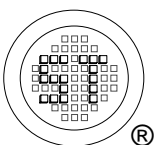
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ST 2SA1663U

SOT-89 PACKAGE OUTLINE



Dimensions in mm



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Certificate No. 9079410



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