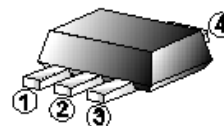


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low Saturation Voltage
- High Speed Switching

## SOT-89



## MARKING

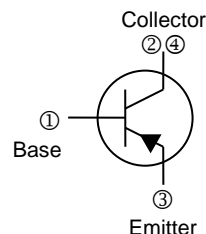
A554

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch

## ORDER INFORMATION

Part Number	Type
2SA554-C	Lead (Pb)-free and Halogen-free



## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

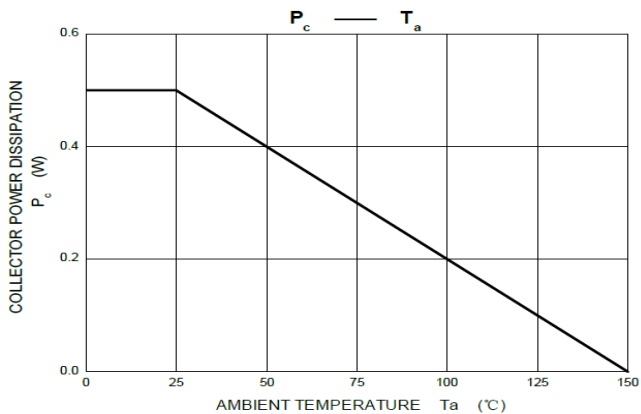
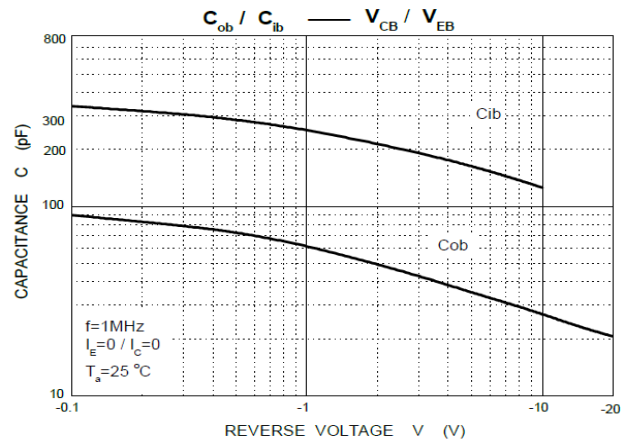
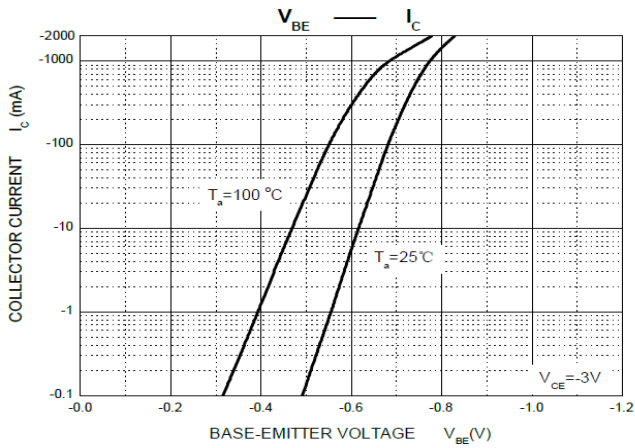
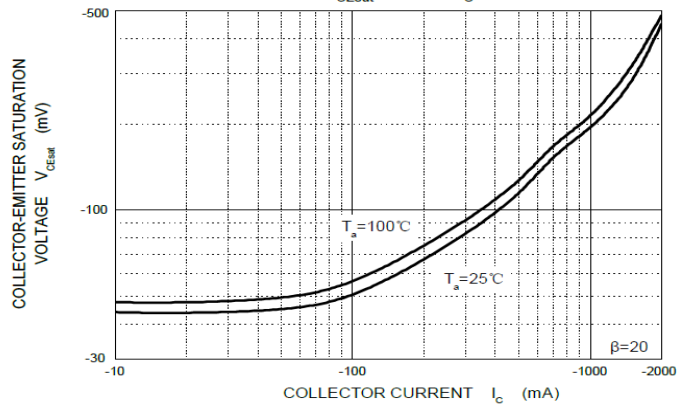
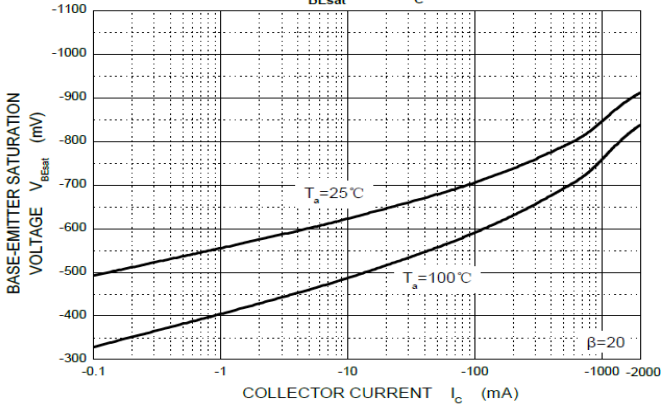
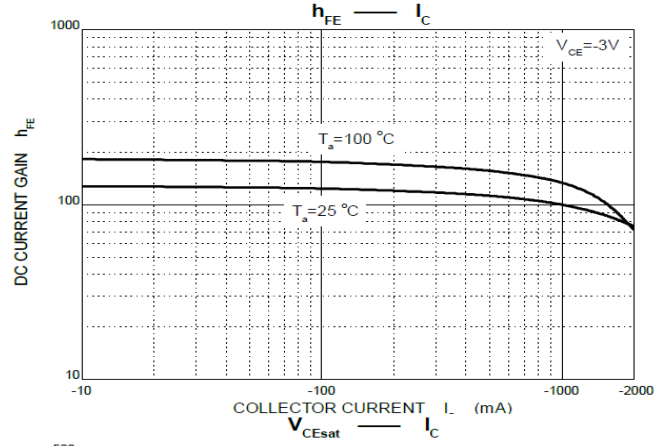
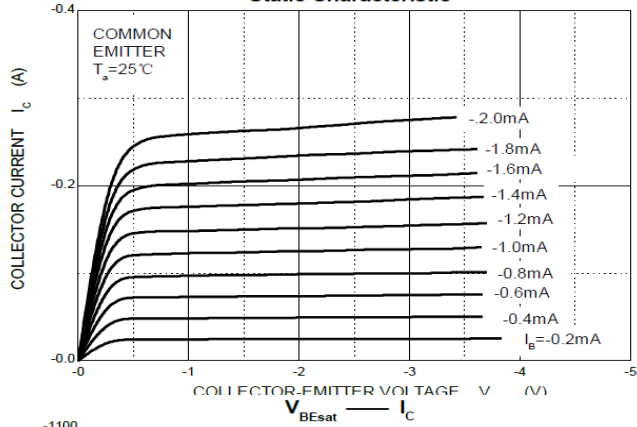
Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-100	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-100	V
Emitter-Base Voltage	V <sub>EBO</sub>	-6	V
Collector Current	I <sub>C</sub>	-2	A
Collector Power Dissipation	P <sub>C</sub>	500	mW
Thermal Resistance from Junction-Ambient	R <sub>θJA</sub>	250	°C/W
Junction & Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	-100	-	-	V	I <sub>C</sub> = -0.1mA, I <sub>E</sub> = 0
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	-100	-	-	V	I <sub>C</sub> = -1mA, I <sub>B</sub> = 0
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	-6	-	-	V	I <sub>E</sub> = -0.1mA, I <sub>C</sub> = 0
Collector Cut-off Current	I <sub>CBO</sub>	-	-	-1	μA	V <sub>CB</sub> = -100V, I <sub>E</sub> = 0
Emitter Cut-off Current	I <sub>EBO</sub>	-	-	-1	μA	V <sub>EB</sub> = -4V, I <sub>C</sub> = 0
DC Current Gain	h <sub>FE</sub>	120	-	270		V <sub>CE</sub> = -3V, I <sub>C</sub> = -100mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	-	-	-0.2	V	I <sub>C</sub> = -0.5A, I <sub>B</sub> = -25mA
		-	-	-0.3		I <sub>C</sub> = -1A, I <sub>B</sub> = -50mA
Transition Frequency	f <sub>T</sub>	30	-	-	MHz	V <sub>CE</sub> = -5V, I <sub>C</sub> = -0.1A
Output Capacitance	C <sub>OB</sub>	-	32	-	pF	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz

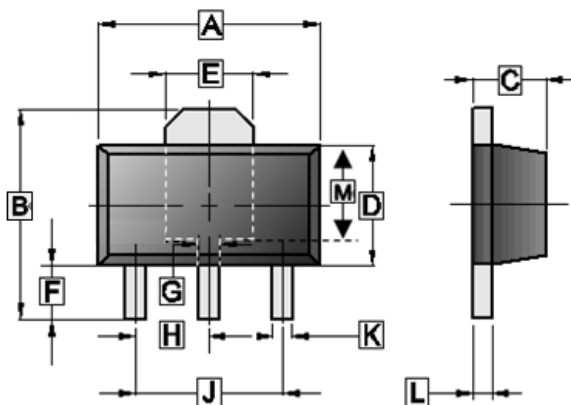
**CHARACTERISTIC CURVES**

Static Characteristic



**PACKAGE OUTLINE DIMENSIONS**

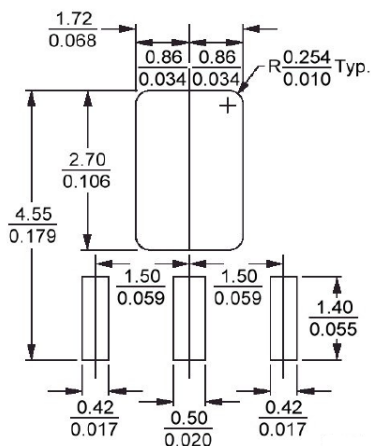
**SOT-89**



REF.	Millimeter	
	Min.	Max.
A	4.40	4.60
B	3.94	4.25
C	1.40	1.60
D	2.25	2.60
E	1.55 TYP.	
F	0.89	1.20
G	0.40	0.58
H	1.50 TYP.	
J	3.00 TYP.	
K	0.32	0.52
L	0.35	0.44
M	1.75 REF.	

**MOUNTING PAD LAYOUT**

**SOT-89**



\*Dimensions in millimeters