

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

## FEATURES

- Low Saturation Voltage
- High Speed Switching

## MARKING

C554

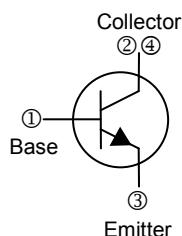
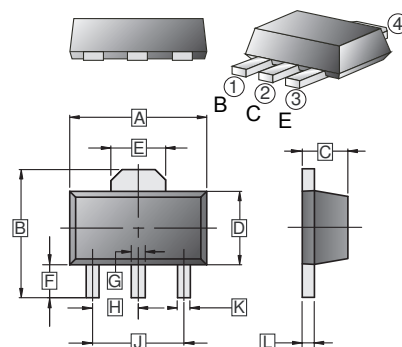
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch

## ORDER INFORMATION

Part Number	Type
2SC554	Lead (Pb)-free
2SC554-C	Lead (Pb)-free and Halogen-free

## SOT-89



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

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V <sub>CB0</sub>	100	V
Collector-Emitter Voltage	V <sub>CEO</sub>	100	V
Emitter-Base Voltage	V <sub>EBO</sub>	6	V
Collector Current-Continuous	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>CB0</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>	82	-	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> =500mA, 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> =100mA
Collector Output Capacitance	C <sub>ob</sub>	-	16	-	pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz

**CHARACTERISTIC CURVES**

