

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

### FEATURE

- High Current
- LOW  $V_{CE(sat)}$

### MARKING

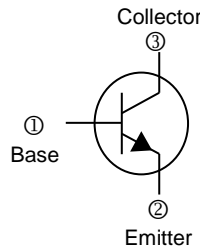
BX

### PACKAGE INFORMATION

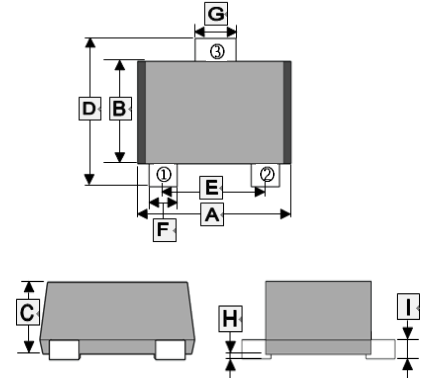
Package	MPQ	Leader Size
SOT-723	8K	7 inch

### ORDER INFORMATION

Part Number	Type
2SC5663-C	Lead (Pb)-free and Halogen-free



### SOT-723



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.15	1.25	F	0.17	0.27
B	0.75	0.85	G	0.27	0.37
C	0.43	0.50	H	0	0.05
D	1.15	1.25	I	0.08	0.15
E	0.80 TYP.				

### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	$V_{CBO}$	15	V
Collector-Emitter Voltage	$V_{CEO}$	12	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current-Continuous	$I_C$	0.5	A
Collector Power Dissipation	$P_C$	0.15	W
Junction & Storage Temperature Range	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	15	-	-	V	$I_C=10\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	12	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut-off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=15\text{V}, I_E=0$
Emitter Cut-off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=6\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	270	-	680		$V_{CE}=2\text{V}, I_C=10\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.25	V	$I_C=200\text{mA}, I_B=10\text{mA}$
Transition Frequency	$f_T$	-	320	-	MHz	$V_{CE}=2\text{V}, I_C=10\text{mA}, f=100\text{MHz}$
Collector Output Capacitance	$C_{ob}$	-	7.5	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

**CHARACTERISTIC CURVES**

