

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

## FEATURES

- LOW  $V_{CE(sat)}$
- Excellent DC current gain characteristics.  
Power Dissipation

## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SA1585-R
Range	180~390
Marking	AER

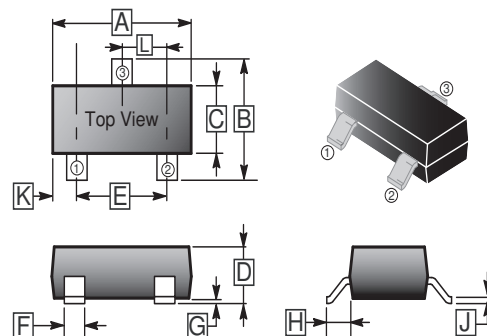
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

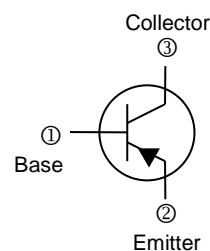
## ORDER INFORMATION

Part Number	Type
2SA1585-R	Lead (Pb)-free
2SA1585-R-C	Lead (Pb)-free and Halogen-free

## SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	0	0.18
B	2.10	3.00	H	0.55	REF.
C	1.20	1.80	J	0.08	0.26
D	0.89	1.30	K	0.6	REF.
E	1.70	2.30	L	0.95	TYP.
F	0.30	0.50			



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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	-20	V
Collector to Emitter Voltage	$V_{CEO}$	-20	
Emitter to Base Voltage	$V_{EBO}$	-6	
Collector Current-Continuous	$I_C$	-2	A
Collector Power Dissipation	$P_C$	350	mW
Junction & Storage Temperature	$T_J, T_{STG}$	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	$V_{(BR)CBO}$	-20	-	-	V	$I_C = -50\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20	-	-		$I_C = -1\text{mA}, I_B = 0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-	-		$I_E = -50\mu\text{A}, I_C = 0$
Collector Cut-off Current	$I_{CBO}$	-	-	-0.1	$\mu\text{A}$	$V_{CB} = -20\text{V}, I_E = 0$
Emitter Cut-off Current	$I_{EBO}$	-	-	-0.1		$V_{EB} = -5\text{V}, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -2\text{A}, I_B = -0.1\text{A}$
DC Current Gain	$h_{FE}$	180	-	390		$V_{CE} = -2\text{V}, I_C = -0.1\text{A}$
Transition Frequency	$f_T$	-	240	-	MHZ	$V_{CE} = -2\text{V}, I_C = -0.5\text{A}, f = 100\text{MHZ}$

**TYPICAL CHARACTERISTIC**

