

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

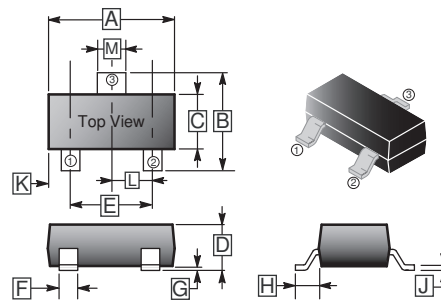
### FEATURES

- Low  $C_{OB}$ ,  $C_{OB}=4.0pF$
- Complements the 2SC4617
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### SOT-523

### CLASSIFICATION OF $h_{FE}$

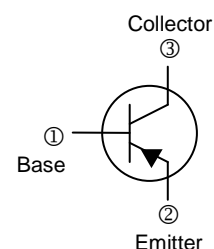
Product-Rank	2SA1774-Q	2SA1774-R	2SA1774-S
Range	120~270	180~390	270~560
Marking	FQ	FR	FS



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55 REF.	
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	
E	0.9	1.1	L	0.5 TYP.	
F	0.15	0.25	M	0.25	0.325

### PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-523	3K	7' inch



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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	-60	V
Collector to Emitter Voltage	$V_{CEO}$	-50	V
Emitter to Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-150	mA
Collector Power Dissipation	$P_C$	150	mW
Junction & Storage Temperature	$T_J, T_{STG}$	150, -55 ~ 150	$^\circ C$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	-60	-	-	V	$I_C=-50\mu A, I_E=0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-50	-	-	V	$I_C=-1\mu A, I_B=0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-6	-	-	V	$I_E=-50\mu A, I_C=0$
Collector cut-off current	$I_{CBO}$	-	-	-0.1	$\mu A$	$V_{CB}=-60V, I_E=0$
Emitter cut-off current	$I_{EBO}$	-	-	-0.1	$\mu A$	$V_{EB}=-6V, I_C=0$
Collector-emitter saturation voltage *	$V_{CE(sat)}$	-	-	-0.5	V	$I_C=-50mA, I_B=-5mA$
Base-emitter saturation voltage *	$V_{BE(sat)}$	-	-	-1.2	V	$I_C=-50mA, I_B=-5mA$
DC current gain	$h_{FE}$	120	-	560		$V_{CE}=-3V, I_C=-1mA$
Transition frequency	$f_T$	-	140	-	MHz	$V_{CE}=-12V, I_E=-2mA, f=30MHz$
Collector output capacitance	$C_{ob}$	-	3.5	5.0	pF	$V_{CB}=-12V, I_E=0, f=1MHz$

\* Pulse Test :Pulse Width  $\leq 300\mu s, D.C \leq 2\%$

**CHARACTERISTIC CURVES**

