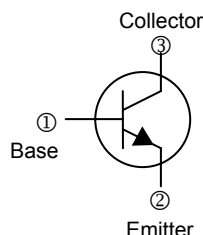


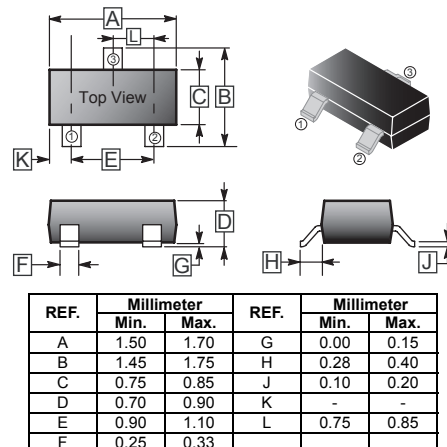
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low collector capacitance
- Low r_{bb} , high gain, and excellent noise characteristics



SOT-523



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector - Base Voltage	V_{CBO}	40	V
Collector - Emitter Voltage	V_{CEO}	25	V
Emitter - Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	50	mA
Collector Power Dissipation	P_c	0.15	W
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	$^\circ\text{C}$

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

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$I_C = 50 \mu\text{A}, I_E = 0$	$V_{(BR)CBO}$	40	-	-	V
Collector-Emitter Breakdown Voltage	$I_C = 1\text{mA}, I_B = 0$	$V_{(BR)CEO}$	25	-	-	V
Emitter-Base Breakdown Voltage	$I_E = 50 \mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	5	-	-	V
Collector Cut-Off Current	$V_{CB} = 24\text{V}, I_E = 0$	I_{CBO}	-	-	0.5	μA
Emitter Cut-Off Current	$V_{EB} = 3\text{V}, I_C = 0$	I_{EBO}	-	-	0.5	μA
Collector-Emitter Saturation Voltage	$I_C = 10\text{mA}, I_B = 1\text{mA}$	$V_{CE(sat)}$	-	-	0.3	V
DC Current Transfer Ratio	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$	h_{FE}	56	-	270	
Transition Frequency	$V_{CE} = 6\text{V}, I_E = 1\text{mA}, f = 100\text{MHz}$	f_T	150	-	-	MHz
Output Capacitance	$V_{CE} = 6\text{V}, I_E = 0\text{A}, f = \text{MHz}$	C_{OB}	-	-	2.2	pF

CLASSIFICATION OF h_{FE}

Rank	N	P	Q
Range	56 – 120	82 – 180	120 – 270
Marking	AN	AP	AQ

CHARACTERISTIC CURVES

