

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

FEATURES

- High Voltage and High Current
- Excellent h_{FE} Linearity
- Complementary to 2SC4738

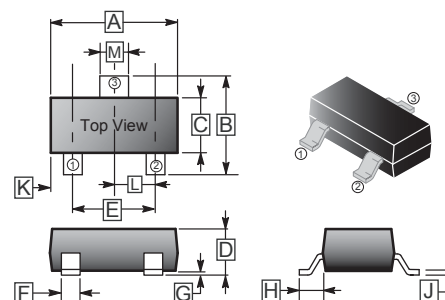
CLASSIFICATION OF h_{FE}

Product-Rank	2SA1832-Y	2SA1832-GR
Range	120~240	200~400
Marking	SY	SG

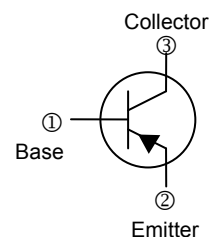
PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-523	3K	7' inch

SOT-523



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



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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-150	mA
Collector Power Dissipation	P_C	100	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	125	$^\circ\text{C} / \text{W}$
Junction and Storage Temperature	T_J, T_{STG}	-55~125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-50	-	-	V	$I_C = -100\mu\text{A}, I_E = 0$
Collector to Emitter Breakdown	$V_{(BR)CEO}$	-50	-	-	V	$I_C = -1\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut - off Current	I_{CBO}	-	-	-100	nA	$V_{CB} = -50\text{V}, I_E = 0$
Emitter Cut - off Current	I_{EBO}	-	-	-100	nA	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain	h_{FE}	120	-	400		$V_{CE} = -6\text{V}, I_C = -2\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.3	V	$I_C = -100\text{mA}, I_B = -10\text{mA}$
Transition Frequency	f_T	80	-	-	MHz	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$
Collector Output Capacitance	C_{ob}	-	4	7	pF	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$

CHARACTERISTICS CURVE

