

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

FEATURES

- High Voltage and High Current
- High DC Current Gain
- Complementary to 2SA1832-C

CLASSIFICATION OF h_{FE}

Product-Rank	2SC4738-GR-C	2SC4738-BL-C
Range	200~400	350~700
Marking	LG	LL

PACKAGE INFORMATION

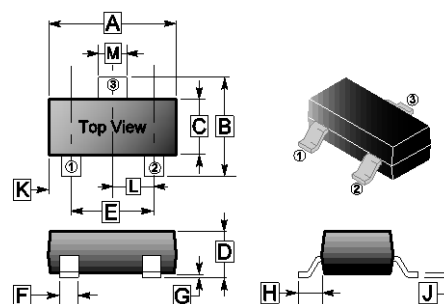
Package	MPQ	Leader Size
SOT-523	3K	7 inch

ORDER INFORMATION

Part Number	Type
2SC4738-□□-C	Lead (Pb)-free and Halogen-free

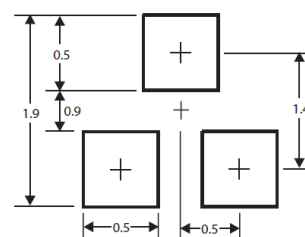
*□= h_{FE} Mark

SOT-523

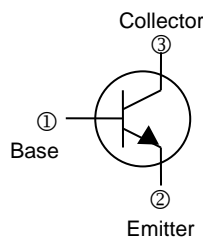


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	G	-	0.10
B	1.45	1.75	H	-	0.55 REF.
C	0.70	0.90	J	0.08	0.20
D	0.60	0.90	K	-	-
E	0.90	1.10	L	-	0.50 TYP.
F	0.15	0.35	M	0.25	0.40

Mounting Pad Layout



*Dimensions in millimeters



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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	150	mA
Collector Power Dissipation	P_C	100	mW
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	1250	$^\circ\text{C/W}$
Junction & Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	60	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	50	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter-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	$V_{CB}=60\text{V}, I_E=0$
Emitter Cut-off Current	I_{EBO}	-	-	100	nA	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	h_{FE}	200	-	700		$V_{CE}=6\text{V}, I_C=2\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.25	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}	-	3.5	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

CHARACTERISTICS CURVE

