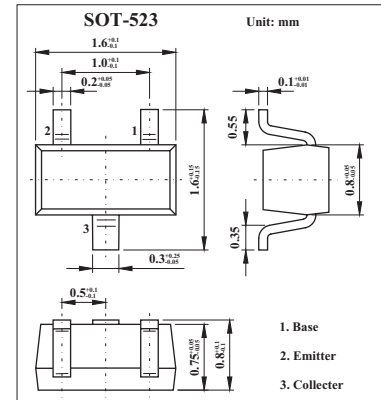


Silicon NPN Epitaxial Planar type

2SC4738

■ Features

- High voltage and high current: $V_{CE}=50V, I_C=150mA$ (Max.)
- Excellent h_{FE} linearity : $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95$ (Typ.)
- High h_{FE} : =120 to 700

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	150	mA
Base current	I_B	30	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	$^\circ C$
Storage temperature range	T_{stg}	-55 to +125	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=2mA$	120		700	
Collector emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.1	0.25	V
Collector output capacitance	c_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		2.0	3.5	pF
Transition frequency	f_T	$V_{CE}=10V, I_C=1mA$	80			MHz

■ h_{FE} Classification

Marking	LY	LGR	LBL
Rank	Y	GR	BL
h_{FE}	120~240	200~400	350~700