



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT
PNP Medium Power Transistor

VOLTAGE 32 Volts CURRENT 2 Ampere

2SB1188GP

APPLICATION

* Power driver and Dc to DC convertor .

FEATURE

* Small flat package. (SC-62/SOT-89)
* Low saturation voltage $V_{CE(sat)} = -0.5V(\text{typ.})(I_C/I_B = -2A/-0.2A)$

CONSTRUCTION

* PNP Switching Transistor

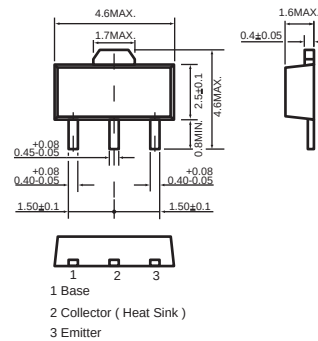
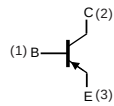
MARKING

* HFE(P):NO
* HFE(Q):NY
* HFE(R):R1188



SC-62/SOT-89

CIRCUIT



Dimensions in millimeters

SC-62/SOT-89

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

RATINGS	CONDITION	SYMBOL	MIN.	MAX.	UNITS
Collector - Base Voltage	Open Emitter	V_{CB0}	-	-40	Volts
Collector - Emitter Voltage	Open Base	V_{CE0}	-	-32	Volts
Emitter - Base Voltage	Open Collector	V_{EB0}	-	-5	Volts
Collector Current DC		I_C	-	-2	Amps
Peak Collector Current	Note 1	I_{CM}	-	-3	Amps
Total Power Dissipation	Note 2	P_{TOT}	-	2	W
Storage Temperature		T_{STG}	-55	+150	$^{\circ}C$
Junction Temperature		T_J	-	+150	$^{\circ}C$

Note

1. Single pulse, $P_w = 100mS$
2. When mounted on a $40 \times 40 \times 0.7$ mm ceramic board

2007-04

RATING CHARACTERISTIC CURVES (2SB1188GP)

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

PARAMETERS	CONDITION	SYMBOL	MIN.	TYPE	MAX.	UNITS
Collector-Base Breakdown Voltage	$I_C = -50\mu\text{A}$	BV_{CBO}	-40	-	-	Volts
Collector-Emitter Breakdown Voltage	$I_C = -1.0\text{mA}$	BV_{CEO}	-32	-	-	Volts
Emitter-Base Breakdown Voltage	$I_E = -50\mu\text{A}$	BV_{ECO}	-5	-	-	Volts
Collector Cut-off Current	$I_E = 0$; $V_{CB} = -20\text{V}$	I_{CBO}	-	-	-1.0	μA
Emitter Cut-off Current	$I_C = 0$; $V_{EB} = -4\text{V}$	I_{EBO}	-	-	-1.0	μA
DC Current Gain	$V_{CE} = -3\text{V}$; Note 3 $I_C = -0.5\text{A}$	h_{FE}	82	-	390	
Collector-Emitter Saturation Voltage	$I_C = -2\text{A}$; $I_E = -0.2\text{A}$; Note 3	V_{CEsat}	-	-0.5	-0.8	Volts
Output Capacitance	$I_E = I_C = 0$; $V_{CB} = -10\text{V}$; $f = 1\text{MHz}$	C_C	-	50	-	pF
Transition Frequency	$I_E = -0.5\text{A}$; $V_{CE} = -5.0\text{V}$; $f = 100\text{MHz}$	f_T	-	100	-	MHz

Note :

3. Measured using pulse current

4. h_{FE} Classification P: 82 to 180, Q: 120 to 270, R: 180 to 390

RATING CHARACTERISTIC CURVES (2SB1188GP)

Typical Electrical Characteristics

Figure 1. Grounded Emitter Propagation Characteristics

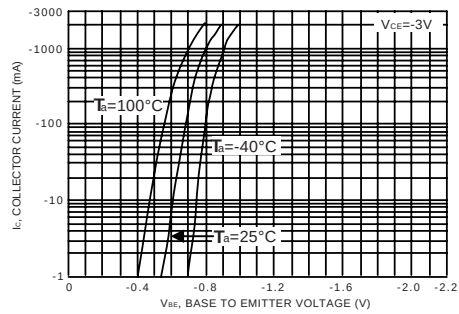


Figure 2. DC Current Gain vs Collector Current

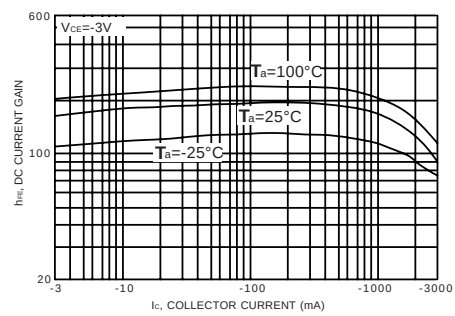


Figure 3. Collector-Emitter Saturation Voltage vs Collector Current

