



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SMALL FLAT PNP Epitaxial Transistor

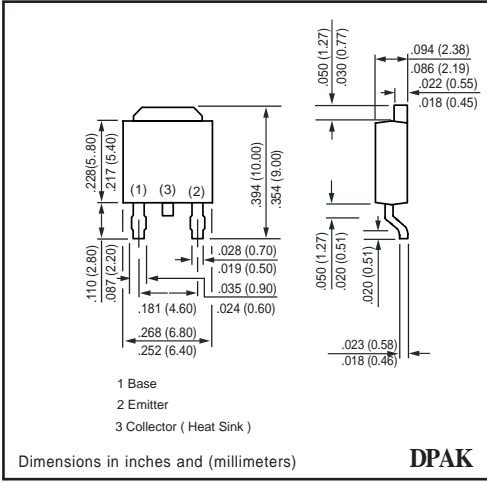
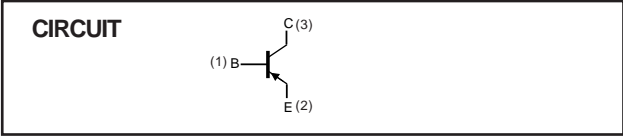
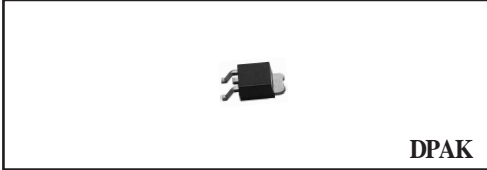
VOLTAGE 32 Volts CURRENT 2 Ampere

2SB1182PT

APPLICATION
* Power driver and Dc to DC convertor .

FEATURE
* Small flat package. (DPAK)
* PC= 1.5 W (mounted on ceramic substrate).
* High saturation current capability.

CONSTRUCTION
* PNP Switching Transistor



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	CONDITION	SYMBOL	MIN.	MAX.	UNITS
Collector - Base Voltage	Open Emitter	VCBO	-	-40	Volts
Collector - Emitter Voltage	Open Base	VCEO	-	-32	Volts
Emitter - Base Voltage	Open Collector	VEBO	-	-5	Volts
Collector Current DC		IC	-	-2	Amps
Peak Collector Current		ICM	-	-3	Amps
Peak Base Current		IBM	-	-0.5	Amps
Total Power Dissipation	TA ≤ 25°C; Note 1	PTOT	-	1500	mW
Storage Temperature		TSTG	-55	+150	°C
Junction Temperature		TJ	-	+150	°C
Operating Ambient Temperature		TAMB	-55	+150	°C

Note

1. Transistor mounted on ceramic substrate 50mmX50mmx0.8t.
2. Measured at Pulse Width 300 us, Duty Cycle 2%.

RATING CHARACTERISTIC CURVES (2SB1182PT)

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

PARAMETERS	CONDITION	SYMBOL	MIN.	TYPE	MAX.	UNITS
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 1 $I_C=-0.5\text{A}$	h_{FE}	82	-	390	
Collector-Emitter Saturation Voltage	$I_C=-2\text{A}; I_B=-0.2\text{A}$	V_{CEsat}	-	-0.3	-0.5	Volts
Base-Emitter Saturatio Voltage	$I_C=-2\text{A}; I_B=-0.2\text{A}$	V_{BEsat}	-	-1.0	-1.5	Volts
Collector Capacitance	$I_E=I_E=0; V_{CB}=-10\text{V}$; $f=1\text{MHz}$	C_C	-	55	-	pF
Transition Frequency	$I_C=-0.1\text{A}; V_{CE}=-5.0\text{V}$; $f=100\text{MHz}$	f_T	-	100	-	MHz

Note :

1. Pulse test: $t_p \leq 300\mu\text{Sec}$; $\delta \leq 0.02$.

RATING CHARACTERISTIC CURVES (2SB1182PT)

Typical Electrical Characteristics

Figure 1. C_c - Reverse V_{cb}

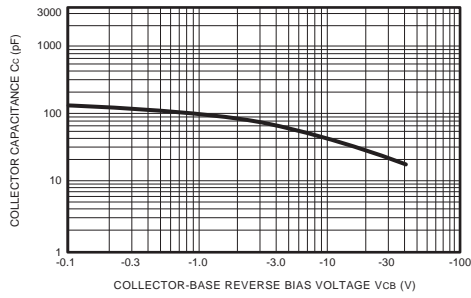


Figure 2. Cutoff Frequency - I_c

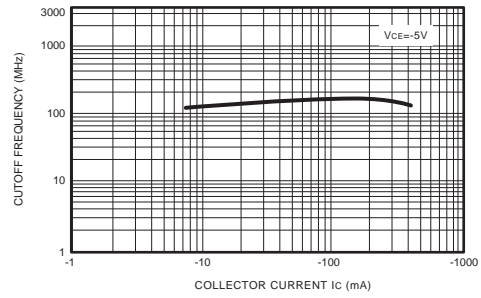


Figure 3. h_{FE} - I_c

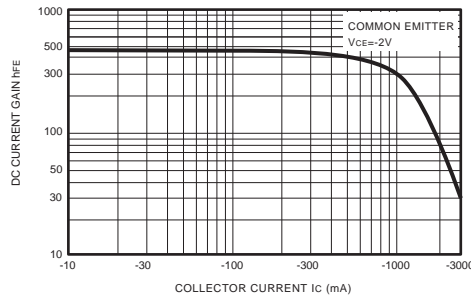


Figure 4. P_c - T_a

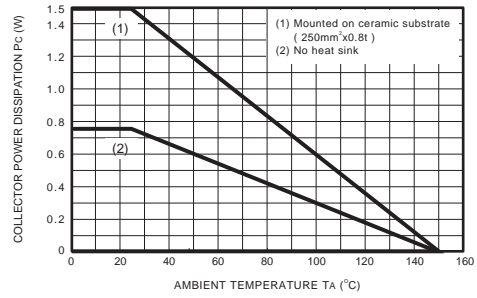


Figure 5. $V_{CE(sat)}$ - I_c

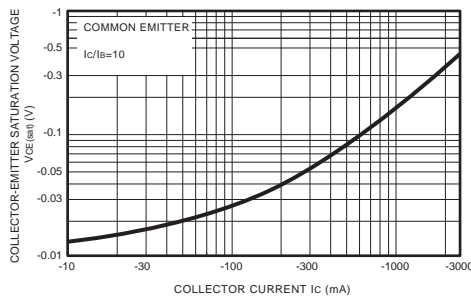


Figure 6. $V_{BE(sat)}$ - I_c

