



# CHENMKO ENTERPRISE CO.,LTD

**2SB717PT**

*Lead free devices*

## SURFACE MOUNT PNP Silicon Power Transistor

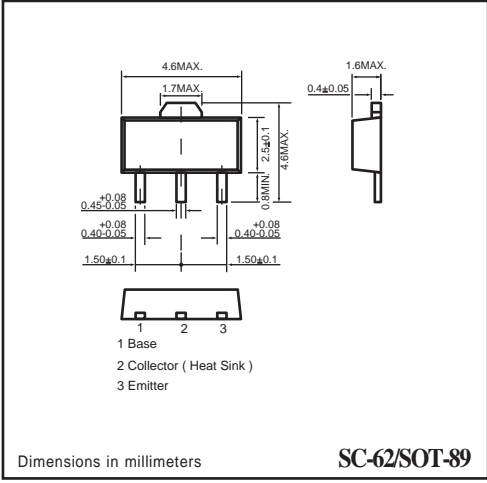
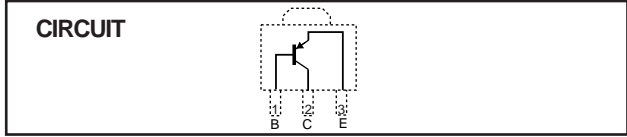
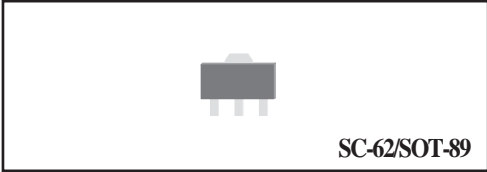
VOLTAGE 12 Volts CURRENT 3 Ampere

**FEATURE**

- \* Small flat package. (SC-62/SOT-89)
- \* Peak pulse current : 10A
- \* Extremely low saturation voltage
- \* PC= 2.0 W
- \* Extremely low equivalent On-resistance

**CONSTRUCTION**

- \* PNP Switching Transistor



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

RATINGS	CONDITION	SYMBOL	2SB717PT	UNITS
Collector - Base Voltage	Open Emitter	VCBO	-12	Volts
Collector - Emitter Voltage	Open Base	VCEO	-12	Volts
Emitter - Base Voltage	Open Collector	VEBO	-5	Volts
Collector Current DC		IC	-3	Amps
Peak Collector Current	Note 1	ICM	-10	Amps
Base Current		IB	-0.5	Amps
Total Power Dissipation	TA ≤ 25°C; Note 2	PTOT	2000	mW
Storage Temperature		TSTG	-55 to +150	°C
Junction Temperature		TJ	-55 to +150	°C
Operating Ambient Temperature		TAMB	-55 to +150	°C

**Note**

2007-04

1. Measured under pulsed conditions. Pulse width=300uS. Duty cycle=2%
2. Maximum power dissipation is calculated assuming that the device is mounted on FR4 substrate measuring 40x40x0.6mm and using comparable measurement methods adopted by other suppliers.

## RATING CHARACTERISTIC CURVES ( 2SB717PT )

### 2SB717PT CHARACTERISTICS

**ELECTRICAL CHARACTERISTICS** ( At TA = 25°C unless otherwise noted )

PARAMETERS	CONDITION	SYMBOL	MIN.	TYPE	MAX.	UNITS
Collector-base breakdown voltage	IC=-100uA	BVCBO	-12	-35	-	Volts
Collector-emitter breakdown voltage	IC=-10mA; Note 3	BVCEO	-12	-25	-	Volts
Emitter-base breakdown voltage	IE=-100uA	BVEBO	-5	-8.5	-	Volts
Collector Cut-off Current	IE=0; VCB=-10V	ICBO	-	-	-0.1	uA
Emitter Cut-off Current	IC=0; VEB=-4V	IEBO	-	-	-0.1	uA
Collector Emitter Cut-off Current	VCE=-10V	ICES	-	-	-0.1	uA
DC Current Gain ; Note 3	IC=-10mA; VCE=-2V	hFE	300	475	-	
	IC=-100mA; VCE=-2V		300	450	-	
	IC=-3000mA; VCE=-2V		160	240	-	
	IC=-8000mA; VCE=-2V		60	100	-	
	IC=-10A; VCE=-2V		45	70	-	
Collector-Emitter Saturation Voltage; Note 3	IC=-100mA; IB=-10mA IC=-1000mA; IB=-10mA IC=-3000mA; IB=-50mA	VCEsat	-	-12 -110 -230	-20 -150 -320	mVolts
Base-Emitter Saturation Voltage; Note 3	IC=-3000mA; IB=-50mA	VBEsat	-	-0.92	-1.05	Volts
Base-Emitter Turn-On Voltage; Note 3	IC=-3000mA; VCE=-2V	VBEon	-	-0.85	-1.0	Volts
Output Capacitance	VCB=-10V; f=1MHz	Cobo	-	21	30	pF
Transition Frequency	IC=-50mA; VCE=-10V; f=100MHz	fr	80	110	-	MHz
Turn-On Time	IC=-2A; VCC=-6V; IB1=IB2=50mA	t(on)	-	70	-	nS
Turn-Off Time	IC=-2A; VCC=-6V; IB1=IB2=50mA	t(off)	-	130	-	nS

#### Note

3. Measured under pulsed conditions. Pulse width=300uS. Duty cycle ≤ 2%