BCX17,18

CASE 318-02/03, STYLE 6
SOT-23 (TO-236AA/AB)

GENERAL PURPOSE TRANSISTOR

PNP SILICON

MAXIMUM RATINGS

Rating	Symbol	Value		Unit
		BCX17	BCX18	
Collector-Emitter Voltage	V_{CEO}	45	25	Vdc
Collector-Base Voltage	V_{CBO}	50	30	Vdc
Emitter-Base Voltage	V_{EBO}	5.0		Vdc
Collector Current — Continuous	I_C	500		mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
*Total Device Dissipation, T_A = 25°C Derate above 25°C	P_D	350 2.8	mW mW/°C
Storage Temperature	T_{stg}	150	°C
*Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W

*Package mounted on 99.5% alumina 10 x 8 x 0.6 mm.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic		Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS						
Collector-Emitter Breakdown Voltage (I_C = 10 mAdc, I_B = 0)	BCX17 BCX18	$V_{(BR)CEO}$	45 25	— —	— —	Vdc
Collector-Emitter Breakdown Voltage (I_C = 10 μAdc, I_C = 0)	BCX17 BCX18	$V_{(BR)CES}$	50 30	— —	— —	Vdc
Collector Cutoff Current (V_{CB} = 20 Vdc, I_E = 0) (V_{CB} = 20 Vdc, I_E = 0, T_A = 150°C)		I_{CBO}	— —	— —	100 5.0	nAdc μAdc
Emitter Cutoff Current (V_{BE} = 5.0 Vdc, I_C = 0)		I_{EBO}	—	—	10	μAdc
ON CHARACTERISTICS						
DC Current Gain (I_C = 100 mAdc, V_{CE} = 1.0 Vdc) (I_C = 300 mAdc, V_{CE} = 1.0 Vdc) (I_C = 500 mAdc, V_{CE} = 1.0 Vdc)		h_{FE}	100 70 40	— — —	600 — —	—
Collector-Emitter Saturation Voltage (I_C = 500 mAdc, I_B = 50 mAdc)		$V_{CE(sat)}$	—	—	0.62	Vdc
Base-Emitter On Voltage (I_C = 500 mAdc, V_{CE} = 1.0 Vdc)		$V_{BE(on)}$	—	—	1.2	Vdc