

JUL 06 1989

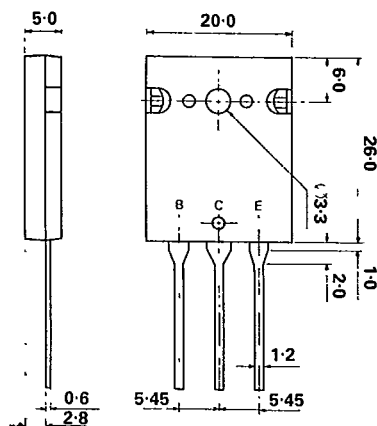
SMLB

SEMELAB**NEW PRODUCT****BUX 98CPF**

**NPN PLANAR TRANSISTOR
MULTI EMITTER ION-IMPLANTED
FOR FAST SWITCHING APPLICATIONS**

MECHANICAL DATA

Dimensions in mm

**FEATURES**

- HIGH BREAKDOWN VOLTAGE
- LOW SATURATION VOLTAGE
- WIDE AREA OF SECONDARY BREAKDOWN
- HIGH CURRENT
- VERY FAST SWITCHING
- HIGH RELIABILITY

APPLICATIONS

- SWITCHMODE POWER SUPPLIES
- DC AND AC MOTOR CONTROLLERS

TO3 PBL (Back of device live to connector)

- ALSO AVAILABLE WITH 'FAST-ON' CONNECTORS
- IDEAL LOW COST ALTERNATIVE TO POWER MODULES

ABSOLUTE MAXIMUM RATINGS ($T_{CASE} = 25^{\circ}C$ unless otherwise stated)

V_{CBO}	Collector-base voltage ($I_E = 0$)	1200V
V_{CEO}	Collector-emitter voltage ($I_B = 0$)	800V
V_{EBO}	Emitter-base voltage ($I_C = 0$)	7V
I_C	Collector current	12A
P_{tot}	Total power dissipation at $T_{CASE} \leq 25^{\circ}C$	200W
T_{stg}	Storage temperature	-55 to $150^{\circ}C$
T_J	Junction temperature	$150^{\circ}C$

SEMELAB LTD., TELEPHONE

8001-8511

Editor

SA

TENTATIVE 4/88

BUX 98CPF

SEMELAB

T-33-15

ELECTRICAL CHARACTERISTICS ($T_{CASE} = 25^{\circ}\text{C}$ unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{(BR)EBO}$ Emitter base breakdown voltage	$I_C = 0$ $I_E = 100\mu\text{A}$	7			V
I_{CEO} Collector cut-off current	$V_{CEO} = 800\text{V}$			10	μA
I_{CEX} Collector cut-off current	$V_{BE} = -1.5\text{V}$ $V_{CEO} = 800\text{V}$ $T_j = 100^{\circ}\text{C}$			10 1.0	μA mA
I_{EBO} Emitter cut-off current	$I_C = 0$ $V_{EB} = 5\text{V}$			10	μA
$V_{CE(sat)^*}$ Collector-emitter saturation voltage	$I_C = 6\text{A}$ $I_B = 1.2\text{A}$	0.3	1.0		V
$V_{BE(sat)^*}$ Emitter-base saturation voltage	$I_C = 6\text{A}$ $I_B = 1.2\text{A}$		1.5		V

* Pulse test $t_p = 300\mu\text{s}$ $\delta \leq 2\%$ 