

JUL 06 1989

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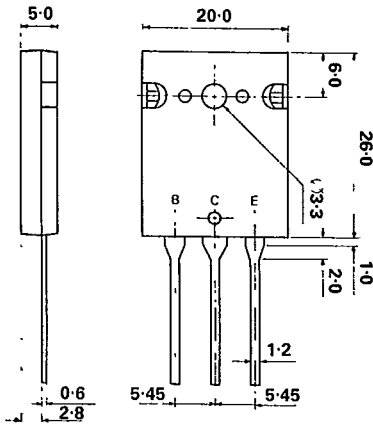
T-33-15

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

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Editor

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BUX 98CPF

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit	
$V_{(BR)EBO}$	Emitter base breakdown voltage	$I_C = 0$	$I_E = 100\mu A$	7	V	
I_{CEO}	Collector cut-off current	$V_{CE0} = 800V$		10	μA	
I_{CEX}	Collector cut-off current	$V_{BE} = -1.5V$	$V_{CE0} = 800V$ $T_j = 100^{\circ}C$	10 1.0	μA mA	
I_{EBO}	Emitter cut-off current	$I_C = 0$	$V_{EB} = 5V$	10	μA	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = 6A$	$I_B = 1.2A$	0.3	1.0	V
$V_{BE(sat)}$	Emitter-base saturation voltage	$I_C = 6A$	$I_B = 1.2A$		1.5	V

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

