BUL98B



MECHANICAL DATA Dimensions in mm (inches)



HIGH VOLTAGE FAST SWITCHING POWER TRANSISTOR

DESCRIPTION

The BUL98B is a silicon multi-epitaxial mesa NPN transistor in a JEDEC TO-3 metal case, intended for military and industrial applications.

- CECC SCREENING OPTIONS
- SPACE QUALITY LEVELS OPTIONS
- JAN LEVEL SCREENING OPTIONS
- HIGH SPEED SWITCHING

PIN 1 – Base

(TO-3) PIN 2 – Emitter

CASE – Collector

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

V _{CER}	Collector - Emitter Voltage (R _{BE} ` 10)	850V
V _{CES}	Collector - Base Voltage (V _{BE} = 0V)	850V
V _{CEO}	Collector - Emitter Voltage ($I_B = 0$)	400V
V _{EBO}	Emitter - Base Voltage ($I_{C} = 0$)	7V
I _C	Collector Current	25A
I _{CM}	Collector Peak Current non (t _p = 5ms)	60A
I _{CP}	Collector Peak Current non Rep (t _p = 20µs)	80A
I _B	Base Current	8A
I _{BM}	Base Peak Current (t _p = 5ms)	30A
P _{tot}	Total Power Dissipation T _{case} < 25°C	250W
T _{STG}	Storage Temperature	-65 to +200°C
TJ	Junction Temperature	200°C

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

	Parameter	Test Conditions	Min.	Тур.	Max.	Unit
V _{CEO(sus)*}	Collector-Emitter Voltage (Sustaining)	I _C =200mA	400			
V _{CER(sus)*}	Collector-Emitter Voltage (Sustaining)	I _C =1A L=2mH	850			V
V _{CE(sat)} *	Collector-Emitter Saturation Voltage	I _C =20A I _B =4A			1.5	v
V _{BE(sat)} *	Base-Emitter Saturation Voltage	I _C =20A I _B =4A			1.6	
I _{CER}	Collector Cutoff Current	$V_{CE} = V_{CES}$			1	μA
		$V_{BE} = 10\Omega$ $T_{case} = 125^{\circ}C$			8	mA
I _{CES}	Collector Cutoff Current	$V_{CE} = V_{CES}$			400	μA
		$V_{BE} = 0V$ $T_{case} = 125^{\circ}C$			4	mA
I _{CEO}	Collector Cutoff Current	V _{CE} =V _{CEO}			2	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} =5V I _C =0			2	mA
t _{on}	Turn-On Time	V _{CC} =150V			1	
t _s	Storage Time	I _C =20A			3	μs
t _f	Fall Time	I _{B1} =I _{B2} =4A			0.8	
R _{JC}	Thermal Resistance Junction to Case				0.7	°C/W

* Pulsed: Pulse Duration = 300µs, duty cycle = 1.5%

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