

# MMBT6517L, NSVMMBT6517L

## High Voltage Transistor

- NSV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

Collector-Emitter Voltage	$V_{CEO}$	350	V
Collector-Base Voltage	$V_{CBO}$	350	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Base Current	$I_B$	25	mA
Collector Current - Continuous	$I_C$	100	mA

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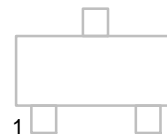
Total Device Dissipation Alumina Substrate, (Note 2) $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	300 2.4	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and Storage Temperature	$T_J, T_{stg}$	55 to +150	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. depending upon manufacturing process

1  
BASE

2  
EMITTER



(T<sub>A</sub> = 25°C unless otherwise noted)

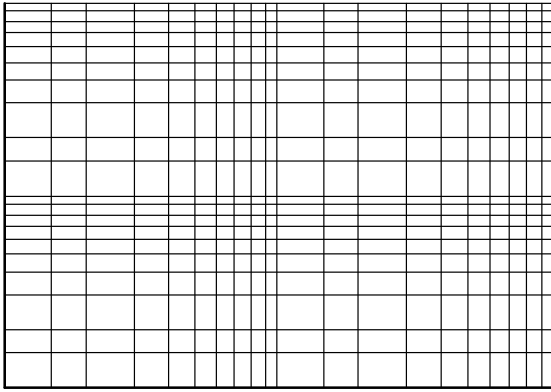
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Collector Emitter Breakdown Voltage (I <sub>C</sub> = 1.0 mA)	V <sub>(BR)CEO</sub>	350		V
Collector Base Breakdown Voltage (I <sub>C</sub> = 100 μA)	V <sub>(BR)CBO</sub>	350		V
Emitter Base Breakdown Voltage (I <sub>E</sub> = 10 μA)	V <sub>(BR)EBO</sub>	6.0		V

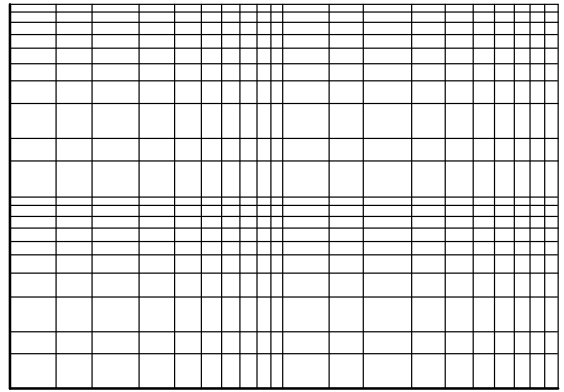
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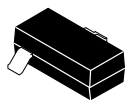
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lc





**SCALE 4:1**

**SOT 23 (TO 236) 2.90x1.30x1.00 1.90P**  
CASE 318  
ISSUE AU

DATE 14 AUG 2024

**SOT 23 (TO 236) 2.90x1.30x1.00 1.90P**  
**CASE 318**  
**ISSUE AU**

DATE 14 AUG 2024

STYLE 6:  
PIN 1. BASE  
2. EMITTER  
3. COLLECTOR

STYLE 7:  
PIN 1. EMITTER  
2. BASE  
3. COLLECTOR

STYLE 8:  
PIN 1. ANODE  
2. NO CONNECTION  
3. CATHODE

STYLE 9:  
PIN 1. ANODE  
2. ANODE  
3. CATHODE

STYLE 10:  
PIN 1. DRAIN  
2. SOURCE  
3. GATE

STYLE 11:  
PIN 1. ANODE  
2. CATHODE  
3. CATHODE-ANODE

STYLE 12:  
PIN 1. CATHODE  
2. CATHODE  
3. ANODE

STYLE 13:  
PIN 1. SOURCE  
2. DRAIN  
3. GATE

STYLE 14:  
PIN 1. CATHODE  
2. GATE  
3. ANODE

STYLE 15:  
PIN 1. GATE  
2. CATHODE  
3. ANODE

STYLE 16:  
PIN 1. ANODE  
2. CATHODE  
3. CATHODE

STYLE 17:  
PIN 1. NO CONNECTION  
2. ANODE  
3. CATHODE

STYLE 18:  
PIN 1. NO CONNECTION  
2. CATHODE  
3. ANODE

STYLE 19:  
PIN 1. CATHODE  
2. ANODE  
3. CATHODE-ANODE

STYLE 22:  
PIN 1. RETURN  
2. OUTPUT  
3. INPUT

STYLE 23:  
PIN 1. ANODE  
2. ANODE  
3. CATHODE  
3.

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