

BUV26 – BUV26A

SILICON POWER TRANSISTORS

High-speed, NPN power transistors in a TO-220 envelope. They are intended for fast switching applications such as high frequency and efficiency converters, switching regulators and motor control.

Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value		Unit
			BUV26	BUV26A	
V_{CBO}	Collector-Base Voltage	$I_E = 0$	180	200	V
V_{CEO}	Collector-Emitter Voltage	$I_B = 0$	90	100	V
V_{EBO}	Emitter-Base Voltage	$I_C = 0$	7	5	V
I_C	Collector Current		14		A
I_{CM}	Collector Peak Current	$t_p = 10ms$	25		A
I_B	Base Current		4		A
I_{BM}	Base Current	$t_p = 10ms$	6		A
P_t	Power Dissipation		85	65	W
T_j	Junction Temperature		150		°C
T_{stg}	Storage Temperature range		-65 to 150		

Limiting values in accordance with the Absolute Maximum System (IEC 134)

THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R_{thJ-mb}	From junction to mounting base	BUV26	1.76	°C/W
		BUV26A		

BUV26 – BUV26A

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Value			Unit	
			Min	Typ	Max		
I_{CEX}	Collector Cutoff Current (*)	$V_{CE} = V_{CESMax}$ $V_{BE} = 1.5V, T_J = 125^\circ C$	BUV26	-	-	1	mA
			BUV26A				
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5 V, I_C = 0$	BUV26	-	-	1	mA
			BUV26A				
$V_{CE0sust}$	Collector-Emitter Sustaining Voltage	$I_B = 0, I_C = 0.2 A$ $L = 25 mH$	BUV26	90	-	-	V
			BUV26A	100	-	-	
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage	$I_C = 6 A, I_B = 600 mA$ $I_C = 5 A, I_B = 500 mA$ $I_C = 12 A, I_B = 1.2 A$ $I_C = 10 A, I_B = 1 A$	BUV26	-	-	0.6	V
			BUV26A	-	-	0.5	
			BUV26	-	-	1.5	
			BUV26A	-	-	1	
$V_{BE(SAT)}$	Base-Emitter Saturation Voltage	$I_C = 6 A, I_B = 600 mA$ $I_C = 5 A, I_B = 500 mA$ $I_C = 12 A, I_B = 1.2 A$ $I_C = 10 A, I_B = 1 A$	BUV26	-	-	1.2	V
			BUV26A	-	-	1.2	
			BUV26	-	-	2	
			BUV26A	-	-	1.5	

SWITCHING TIMES

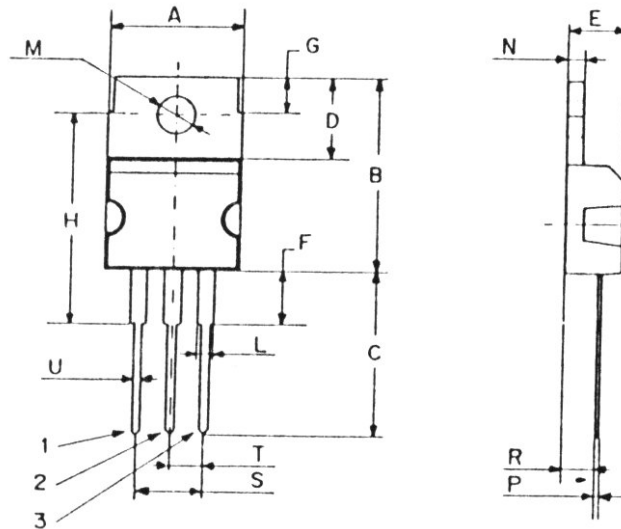
Symbol	Ratings	Test Condition(s)	Value			Unit	
			Min	Typ	Max		
t_{on}	turn-on time	For BUV26 $I_C = 12 A, V_{CC} = 50 V$ $I_{B1} = 1.2 A, I_{B2} = 2 A$	BUV26	-	0.4	0.8	μs
			BUV26A				
t_{off}	turn-off time	For BUV26A $I_C = 10 A, V_{CC} = 50 V$ $I_{B1} = 1 A, I_{B2} = 2 A$	BUV26	-	0.5	1.2	
			BUV26A				
t_f	Fall time	$I_C = 10 A, V_{CC} = 50 V$ $I_{B1} = 1 A, I_{B2} = 2 A$	BUV26	-	0.12	0.4	
			BUV26A				

(*) Measured with a half-sinewave voltage (curve tracer).

BUV26 – BUV26A

MECHANICAL DATA CASE TO-220

DIMENSIONS (mm)		
	Min.	Max.
A	9,90	10,30
B	15,65	15,90
C	13,20	13,40
D	6,45	6,65
E	4,30	4,50
F	2,70	3,15
G	2,60	3,00
H	15,75	17,15
L	1,15	1,40
M	3,50	3,70
N	-	1,37
P	0,46	0,55
R	2,50	2,70
S	4,98	5,08
T	2,49	2,54
U	0,70	0,90



Pin 1 :	Base
Pin 2 :	Collector
Pin 3 :	Emitter
Package	Collector

Revised August 2012

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.