

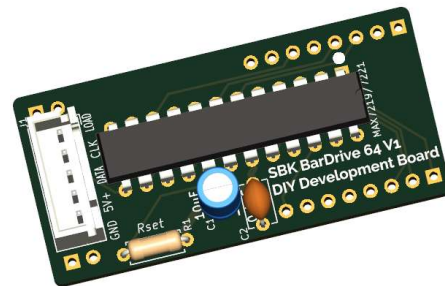
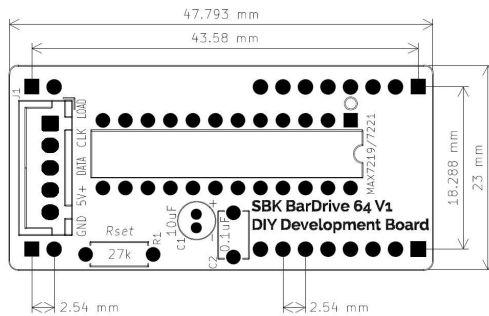
**Table 11.  $R_{SET}$  vs. Segment Current and LED Forward Voltage**

$I_{SEG}$ (mA)	$V_{LED}$ (V)				
	1.5	2.0	2.5	3.0	3.5
40	12.2	11.8	11.0	10.6	9.69
30	17.8	17.1	15.8	15.0	14.0
20	29.8	28.0	25.9	24.5	22.6
10	66.7	63.7	59.3	55.4	51.2

**Note:**  $R_{SET}$  values are in Kilo Ohms (k $\Omega$ )

**Reference :** 19-4452; Rev 6; 8/21

PCB:					SBK BarDrive 64 V1
Component Count:					7
Collated Components:					
Item	Qty	Ref	Value	Part	
1	1	C1	10uF	Electrolytic capacitor : THT Radial D4.0mm H7.0mm P1.50mm	
2	1	C2	0.1uF	Ceramic capacitor : THT D5.1mm W8.2mm P5.00mm	
3	1	J1	JST-XH 1x05	JST-XH PCBterminal male plug : THT 1x05 P2.50mm Vertical	
4	1	J2	Conn_01x02	optional 2.54mm header	
5	1	J3	Conn_01x11	optional 2.54mm header	
6	1	R1	Rset	1/4Wresistor : THT L6.3mm D2.5mm P7.62mm_Horizontal must be selected according to reference table	
7	1	U1	MAX7219xNG MAX7221xNG	MAX72xxICleds driver : DIP-24_W7.62mm	



SBK BarDrive 64 V1 PCB  
MAX7219/MAX7221 ICs leds driver PCB.  
To use with as a backpack with compatible SBK BarMeter xx PCBs  
or any other compatible leds displays

**Smart Builds & Kits**

Sheet: /  
File: SBK\_BarDrive 64 V1.kicad\_sch

**Title: Schematics and dimensions**

Size: USLetter Date: 2025-06-16  
KiCad E.D.A. kicad 7.0.9

**Rev: 1**  
Id: 1/1