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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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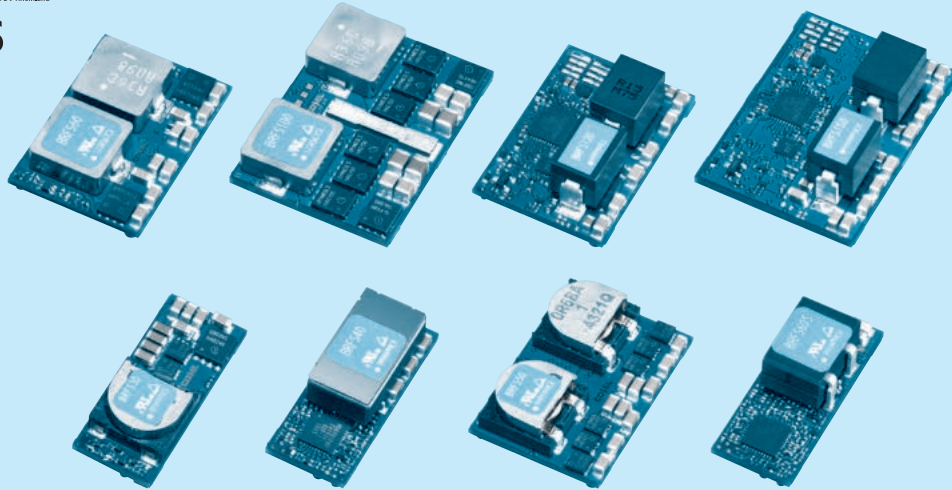
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# BRFS

BRF S 50 L - □

① ② ③ ④ ⑤



- ① Series name
- ② Single output
- ③ Output current  
30:30A  
40:40A  
50:50A  
60:60A  
100:100A  
120:120A  
150:150A
- ④ Type  
Blank : Standard type  
L : Low profile type (only 50A)  
S : Small type (only 60A)
- ⑤ Optional  
R : Positive logic remote on/off  
I : POWERGOOD (only BRFS30/40/60S)  
\*Other models has POWERGOOD function normally.  
P : Parallel operation (only BRFS30/40/60S)  
Y1 : Fast transient response (only BRFS100)  
D : With switching frequency synchronization function (BRFS120 and BRFS150)  
L : High thermal dissipation (BRFS120 and BRFS150)

MODEL	BRFS30	BRFS40	BRFS50	BRFS50L	BRFS60	BRFS60S	BRFS100	BRFS120	BRFS150
MAX OUTPUT CURRENT[A]	30.0	40.0	50.0	50.0	60.0	60.0	100.0	120.0	150.0
DC OUTPUT	0.8 - 3.63V	0.6 - 2.0V	0.7 - 2.0V	0.7 - 2.0V	0.7 - 2.0V	0.6 - 2.0V	0.7 - 2.0V	0.6 - 1.8V	0.6 - 1.8V

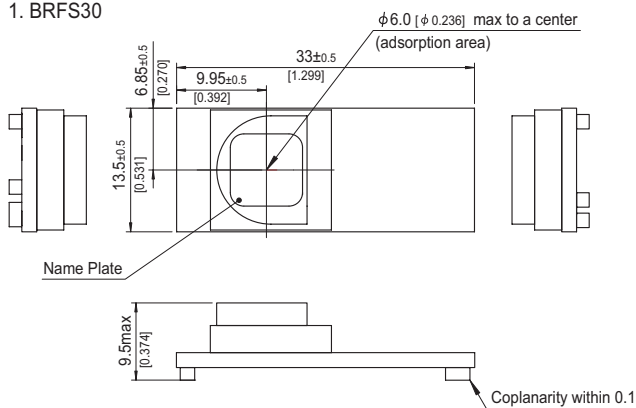
## SPECIFICATIONS

	MODEL	BRFS30	BRFS40	BRFS50	BRFS50L	BRFS60	BRFS60S	BRFS100	BRFS120	BRFS150	
INPUT	VOLTAGE[V]	DC4.5 - 14.0									
	CURRENT[A]	*1 3.41 typ	4.52 typ	5.68 typ	5.68 typ	6.82 typ	6.71 typ	11.24 typ	13.50 typ	16.90 typ	
	EFFICIENCY[%]	*1 88.0 typ	88.5 typ	88.0 typ	88.0 typ	88.0 typ	89.5 typ	89.0 typ	89.0 typ	89.0 typ	
OUTPUT	VOLTAGE[V]	*2 0.8 - 3.63	0.6 - 2.0	0.7 - 2.0	0.7 - 2.0	0.7 - 2.0	0.6 - 2.0	0.7 - 2.0	0.6 - 1.8	0.6 - 1.8	
	CURRENT[A]	30	40	50	50	60	60	100	120	150	
	LINE REGULATION[mV]	5									
	LOAD REGULATION[mV]	5									
	RIPPLE[mVp-p]	*3 25									
	RIPPLE NOISE[mVp-p]	*3 50									
	OUTPUT VOLTAGE SETTING [%Vo]	±1									
	DRIFT[mV]	*4 5									
	START-UP TIME[ms]	8.0 typ						12.0 typ *6	8.0 typ	12.0 typ *6	
	OUTPUT VOLTAGE ADJUSTMENT RANGE [V]	Adjustable by external resistor									
	0.8 - 3.63	0.6 - 2.0	0.7 - 2.0	0.7 - 2.0	0.7 - 2.0	0.6 - 2.0	0.7 - 2.0	0.6 - 1.8	0.6 - 1.8		
OUTPUT VOLTAGE TOTAL REGULATION [%Vo]*5	±3										
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (auto recovery type)									
	REMOTE SENSING	Available (+S only)			Available			Available (+S only)		Available	
	REMOTE ON/OFF	Available Negative logic L:ON, H:OFF									
ISOLATION	INPUT-OUTPUT	non-isolated									
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-40 to +85°C, 20-95%RH (Non condensing) (Refer to DERATING CURVE) 3,000m (10,000feet) max									
	STORAGE TEMP., HUMID. AND ALTITUDE	-40 to +100°C, 20-95%RH (Non condensing), 9,000m (30,000feet) max									
	VIBRATION	10-55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis									
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis									
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL (CSA60950-1), EN60950-1									
OTHERS	CASE SIZE/WEIGHT	33.0X9.5X13.5mm [1.3X0.37X0.53 inches] (WXHXD)/ 10g max	33.0X10.9X13.5mm [1.3X0.43X0.53 inches] (WXHXD)/ 12g max	33.0X9.5X22.9mm [1.3X0.37X0.9 inches] (WXHXD)/ 15g max	33.0X7.0X22.9mm [1.3X0.28X0.9 inches] (WXHXD)/ 12g max	33.0X8.0X22.9mm [1.3X0.31X0.9 inches] (WXHXD)/ 15g max	33.0X12.7X13.5mm [1.3X0.5X0.53 inches] (WXHXD)/ 12g max	38.0X8.5X27.7mm [1.5X0.33X1.09 inches] (WXHXD)/ 22g max	33.0X12.7X22.9mm [1.3X0.5X0.9 inches] (WXHXD)/ 14g max	38.0X13.8X27.7mm [1.5X0.54X1.09 inches] (WXHXD)/ 21g max	
	COOLING METHOD	Convection / Forced air									

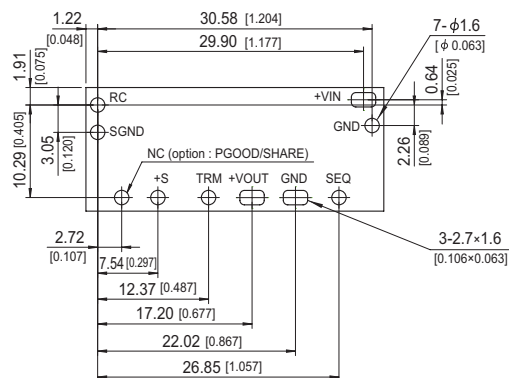
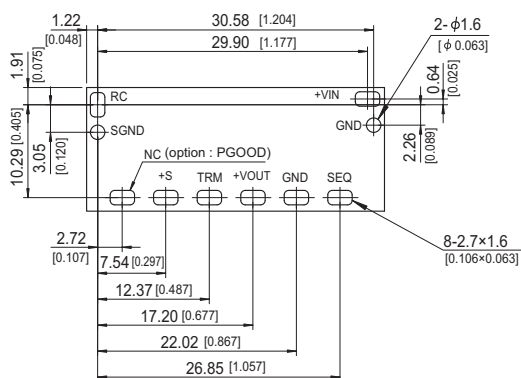
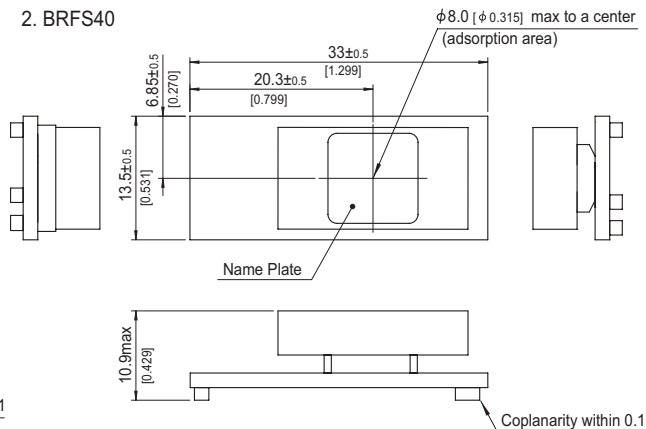
\*1 At rated input (DC12V) and rated output (1.2V) Ta=25°C.  
 \*2 Output voltage is adjusted to the minimum when TRM is opened.  
 \*3 Ripple and ripple noise is measured by using measuring board with ceramic capacitor at 50mm from output pin.  
 \*4 Drift is the change in DC output for an eight hour period after a half - hour warm - up at 25°C, with the input voltage held.  
 \*5 Output voltage setting is added line regulation and load regulation and temperature regulation used resistance of the 0.5% tolerance.  
 \*6 The start-up time when using the RC terminal is same as other BRFS.

External view

1. BRFS30

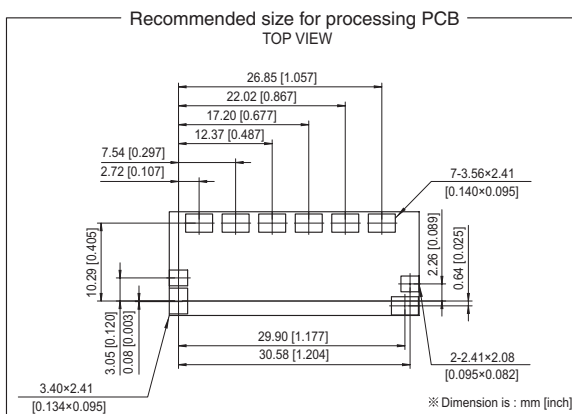


2. BRFS40



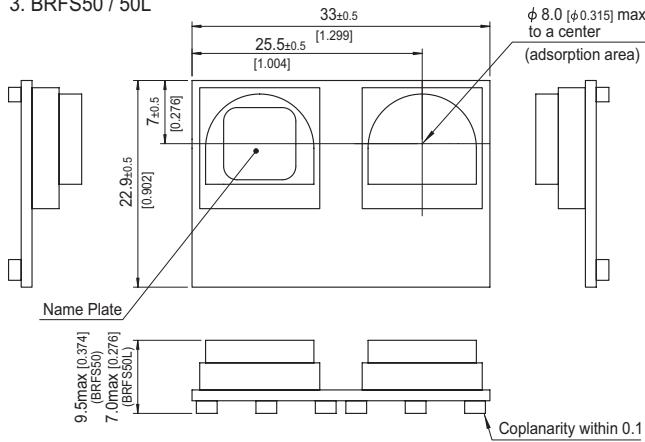
- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 10g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 12g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

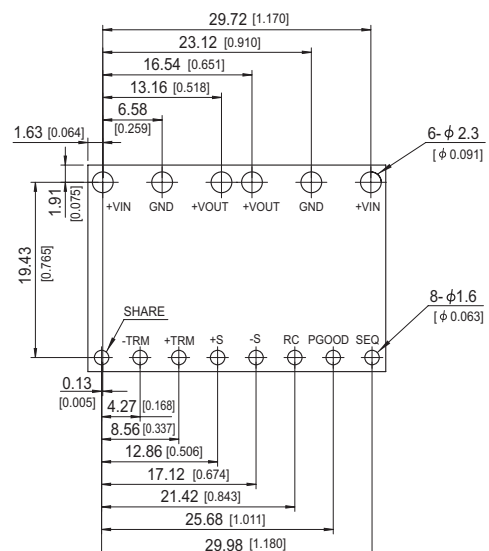
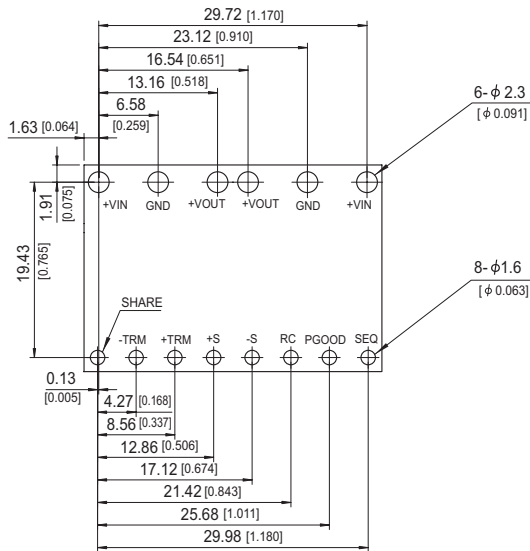
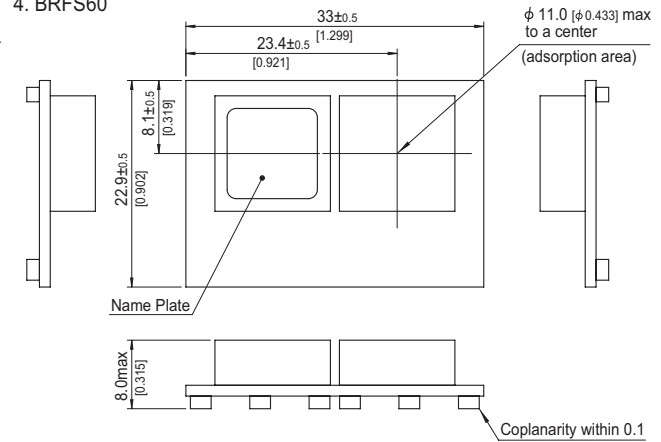


External view

3. BRFS50 / 50L

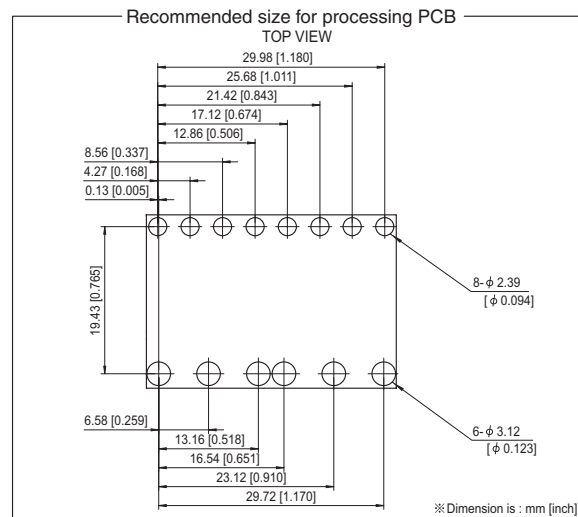


4. BRFS60



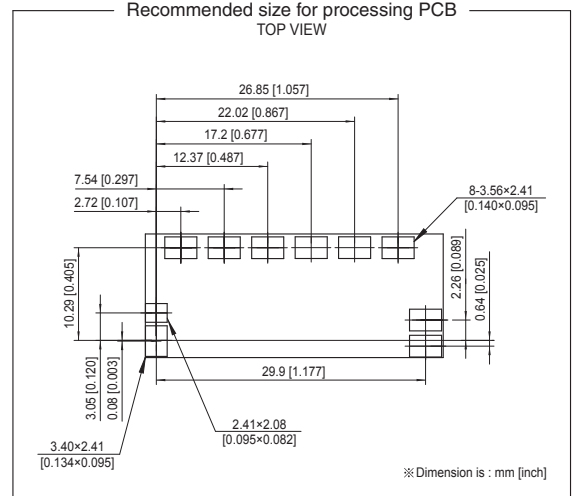
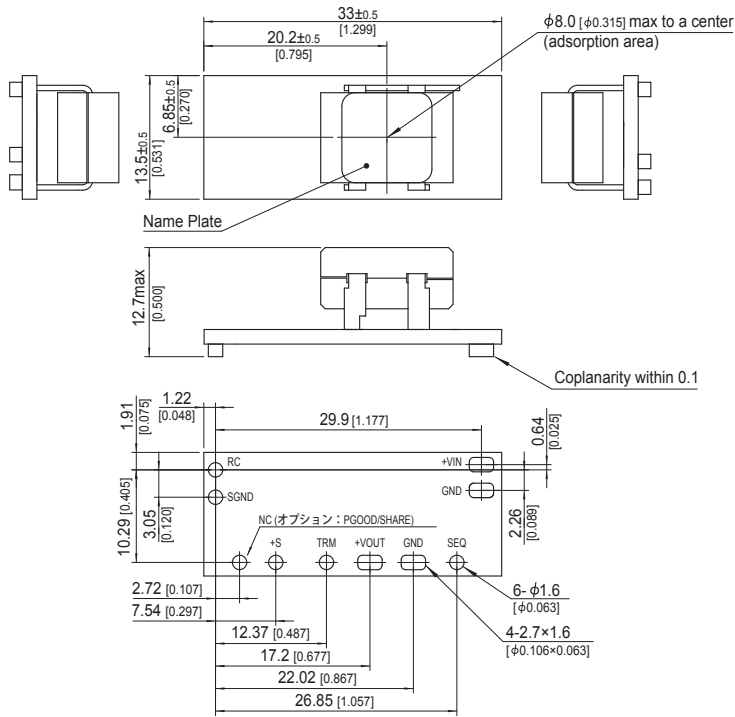
- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 15g max (BRFS50)  
12g max (BRFS50L)
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 15g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating



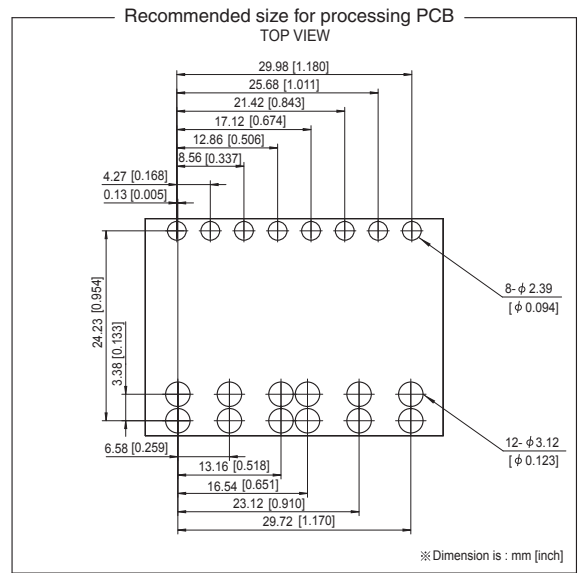
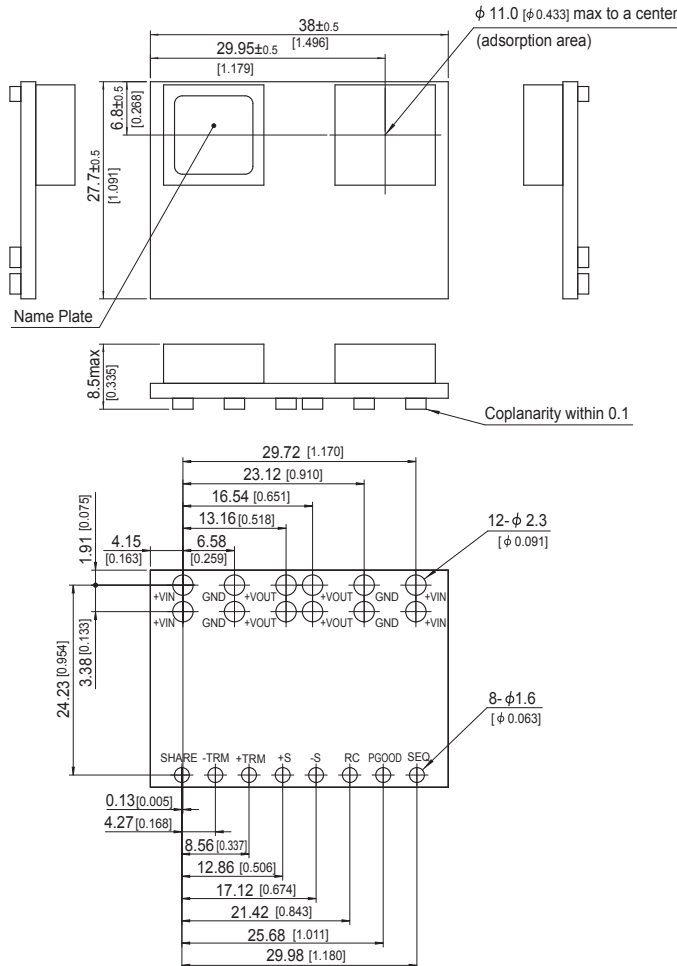
External view

5. BRFS60S



- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 12g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

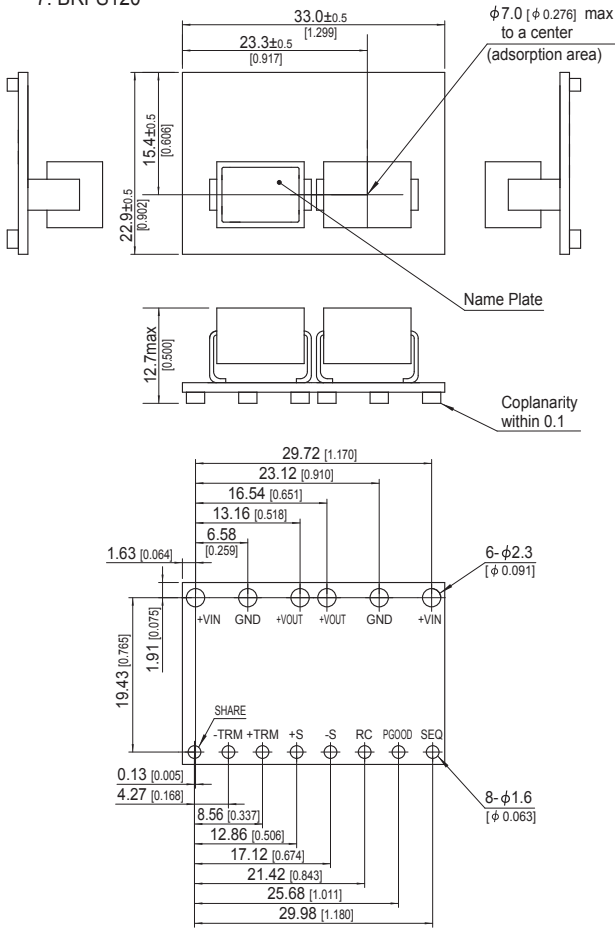
6. BRFS100



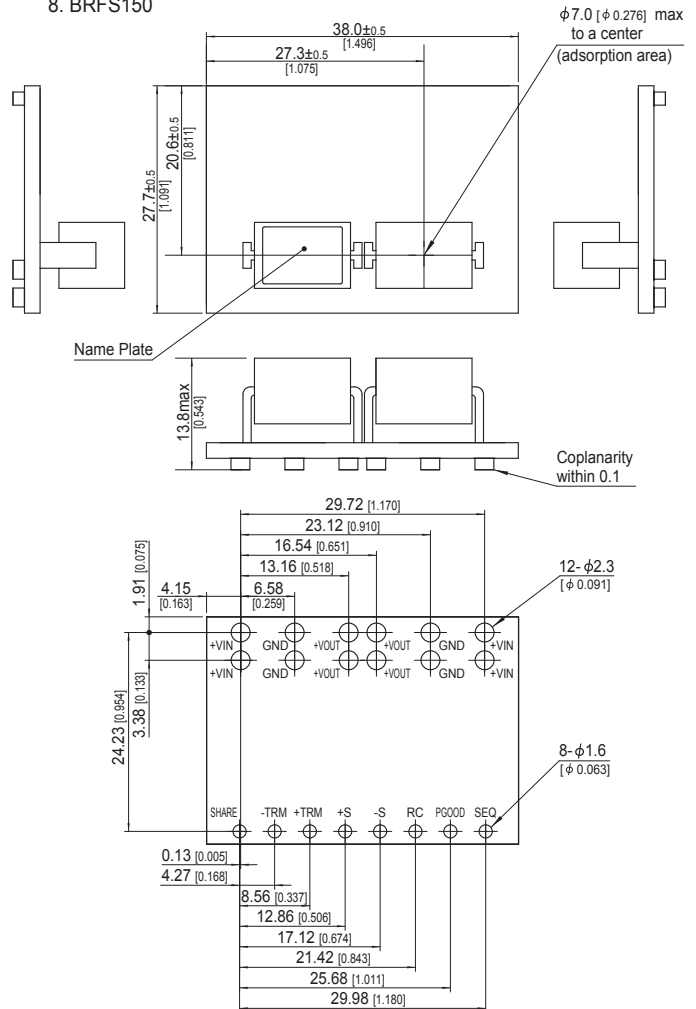
- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 22g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

External view

7. BRFS120



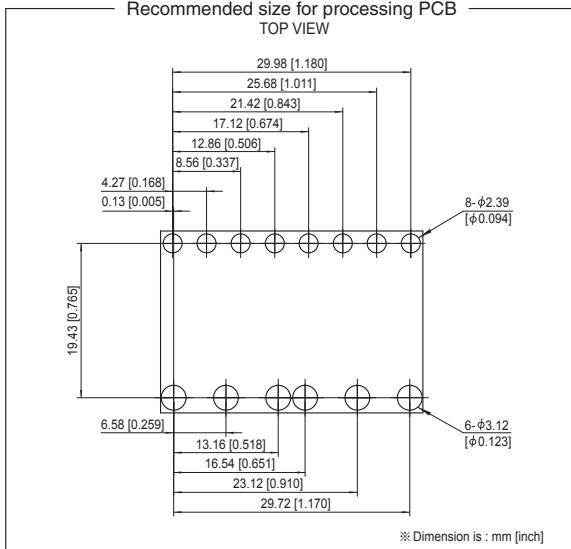
8. BRFS150



- ※ Tolerance :  $\pm 0.3$  [ $\pm 0.012$ ]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 14g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

- ※ Tolerance :  $\pm 0.3$  [ $\pm 0.012$ ]
- ※ Dimensions in mm, [ ]=inches
- ※ Weight : 21g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

Recommended size for processing PCB  
TOP VIEW



Recommended size for processing PCB  
TOP VIEW

