

BRFS

BRF S 50 L - ☐

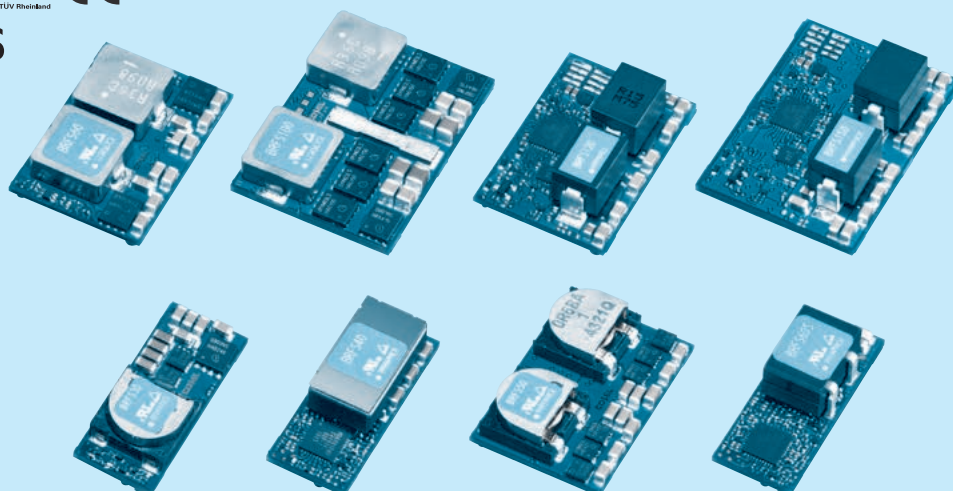
①

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 BRFS40/60S)
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 ^{*7}

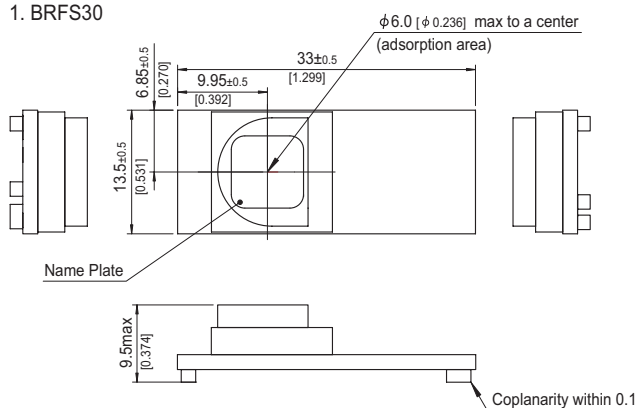
SPECIFICATIONS

	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 *7
	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								
	OUTPUT VOLTAGE TOTAL REGULATION [%Vo]*5	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 *7
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/s² (5G), 3minutes period, 60minutes each along X, Y and Z axis								
	IMPACT	196.1m/s² (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								

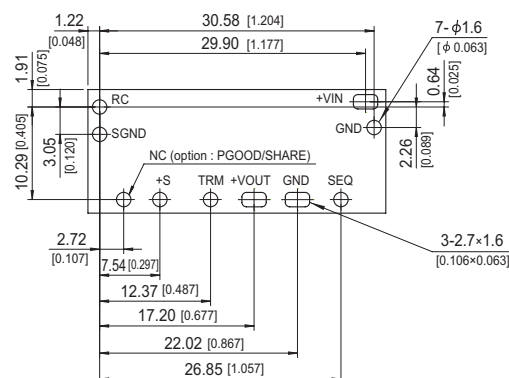
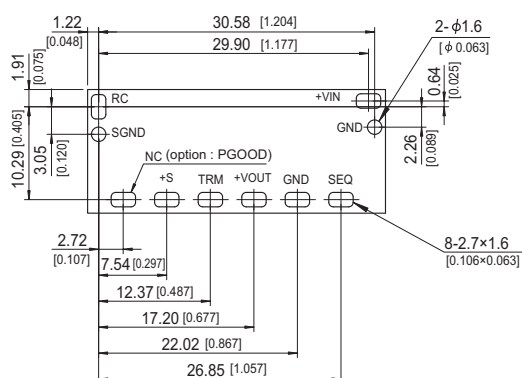
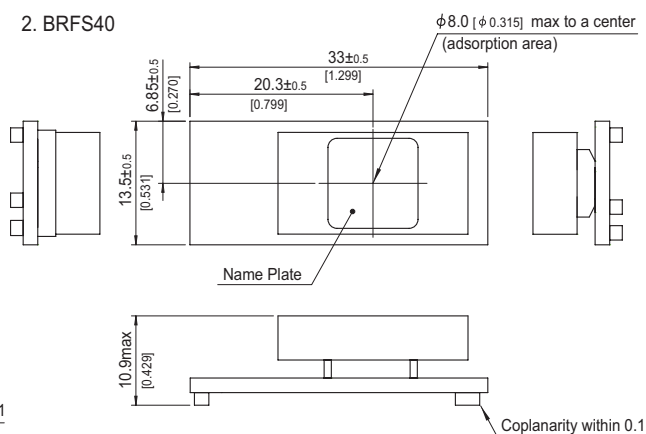
- ^{*1} At rated input (DC12V) and rated output (1.2V) Ta=25°C.
- ^{*2} Output voltage is adjusted to the minimum when TRM is opened.
- ^{*3} Ripple and ripple noise is measured by using measuring board with ceramic capacitor at 50mm from output pin.
- ^{*4} Drift is the change in DC output for an eight 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.
- ^{*7} The output voltage adjustment area determines by the input voltage.

External view

1. BRFS30

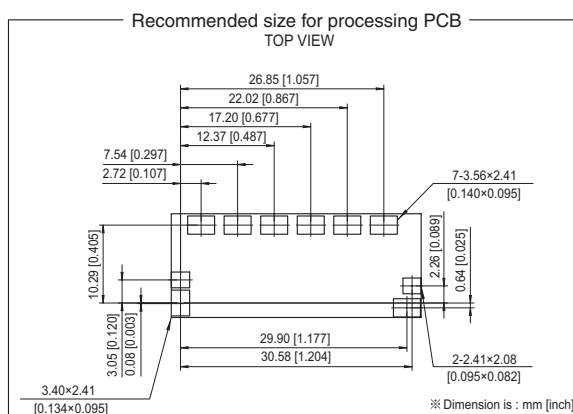


2. BRFS40



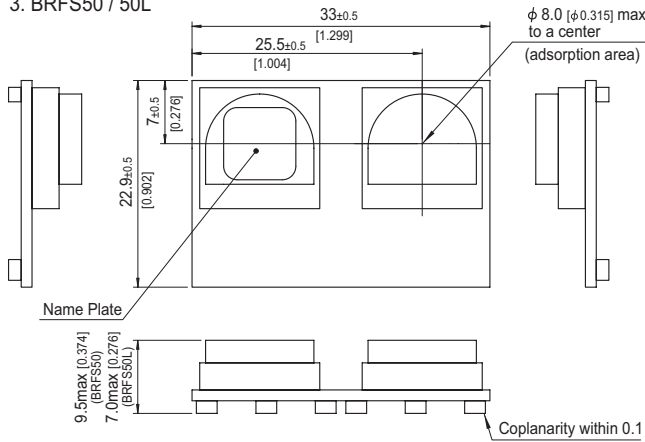
※ Tolerance : $\pm 0.3 [\pm 0.012]$
 ※ Dimensions in mm, []=inches
 ※ Weight : 10g max
 ※ Terminal material : copper
 ※ Plating treatment of terminal : Lead free plating

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

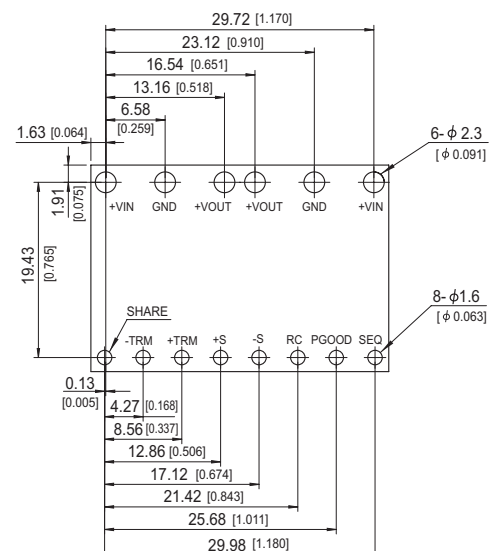
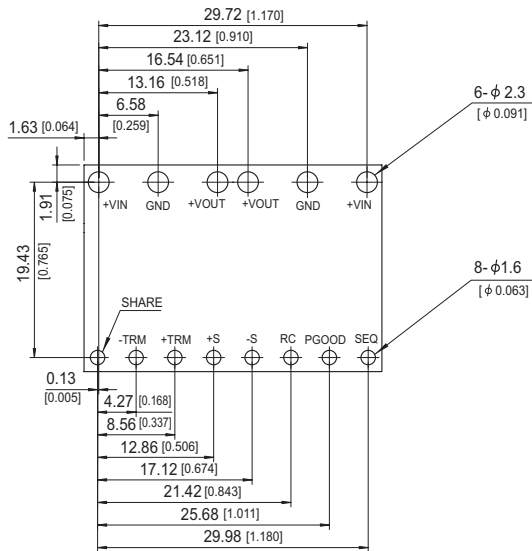
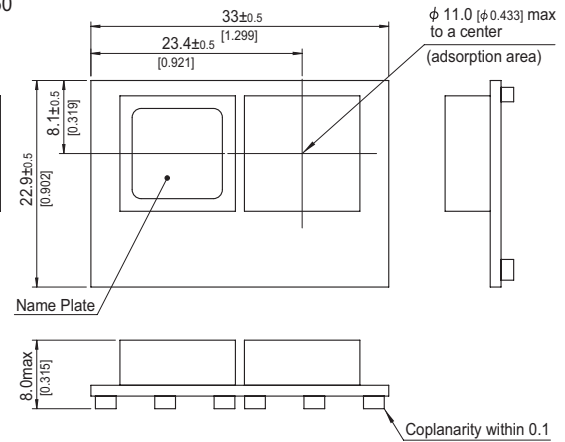


External view

3. BRFS50 / 50L

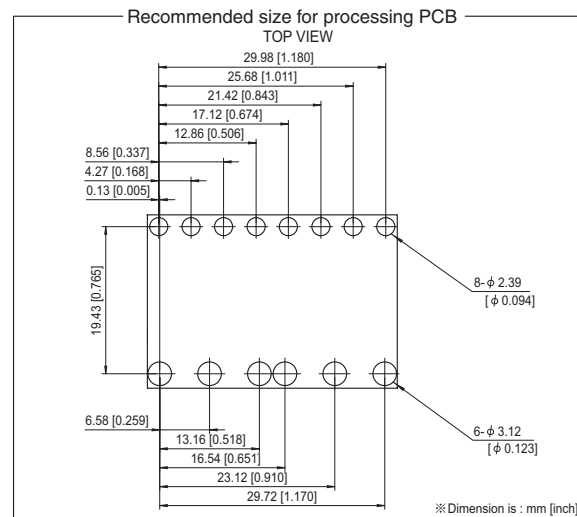


4. BRFS60



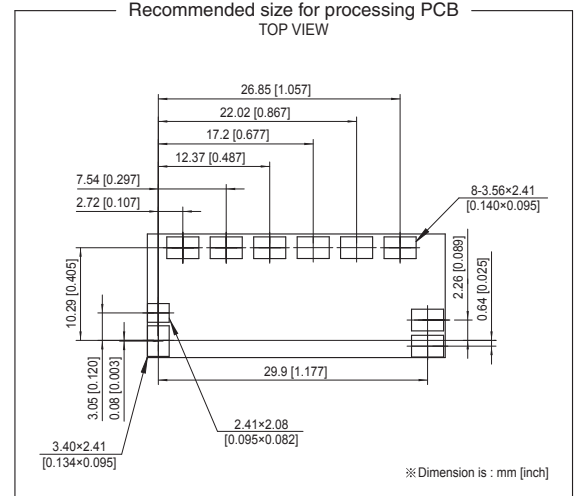
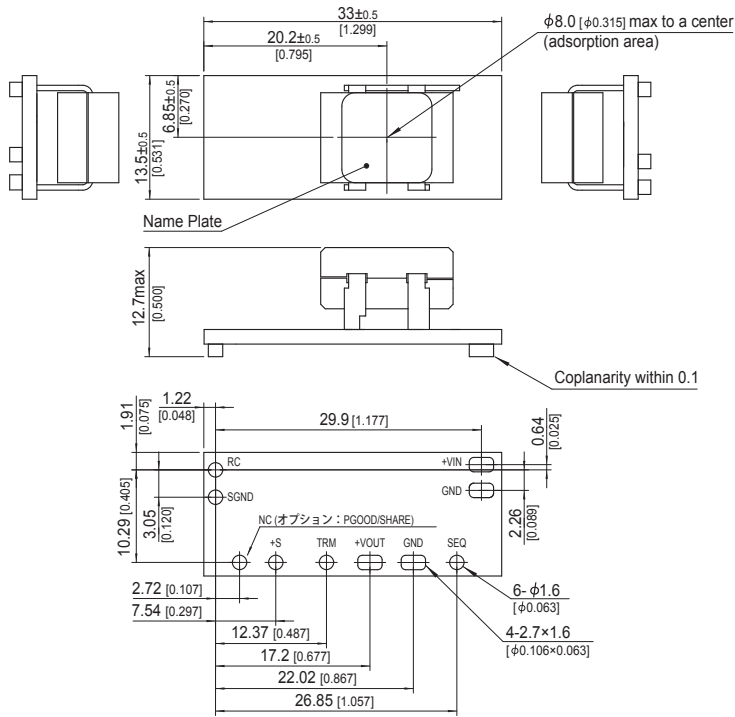
※ Tolerance : $\pm 0.3 [\pm 0.012]$
 ※ Dimensions in mm, []=inches
 ※ Weight : 15g max (BRFS50)
 12g max (BRFS50L)
 ※ Terminal material : copper
 ※ Plating treatment of terminal : Lead free plating

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



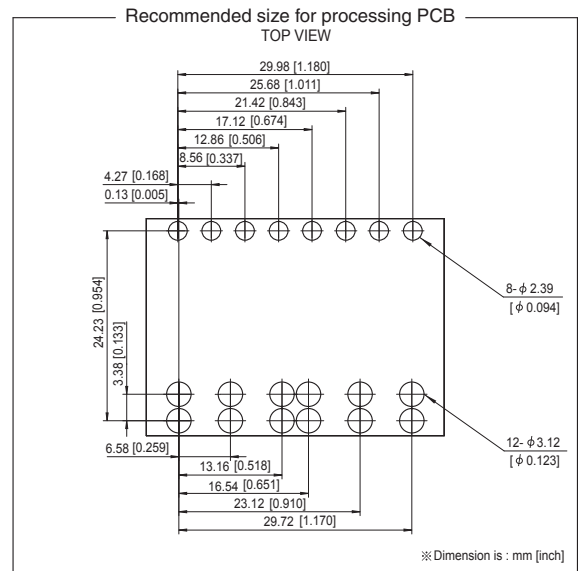
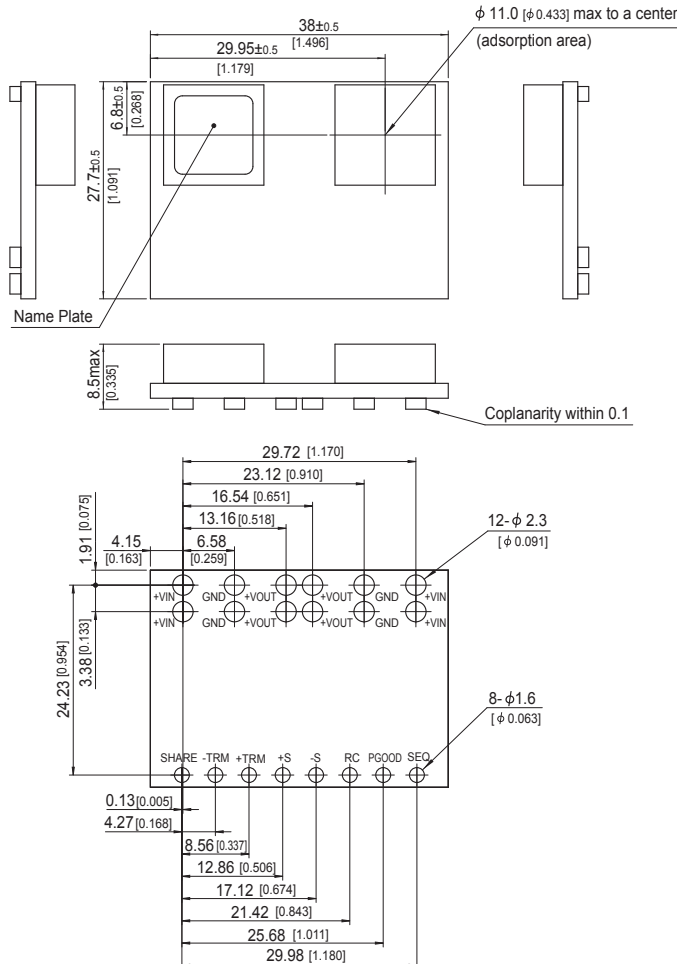
External view

5. BRFS60S



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

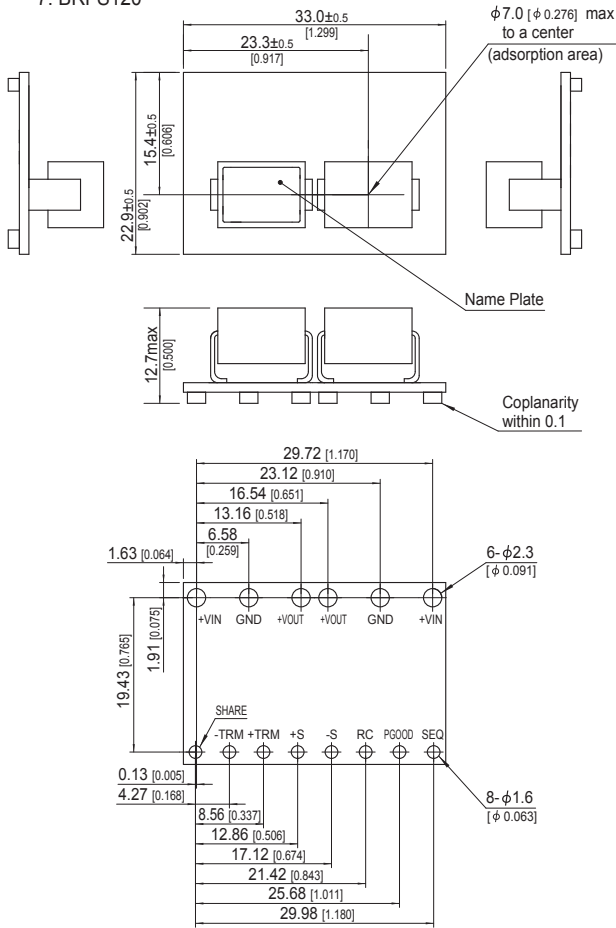
6. BRFS100



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

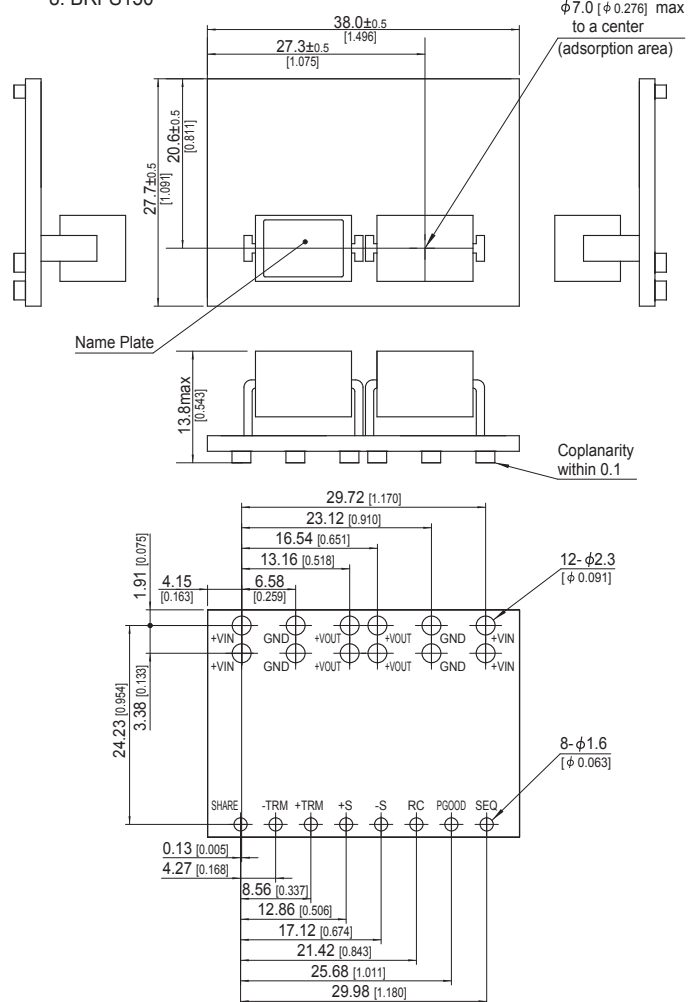
External view

7. BRFS120

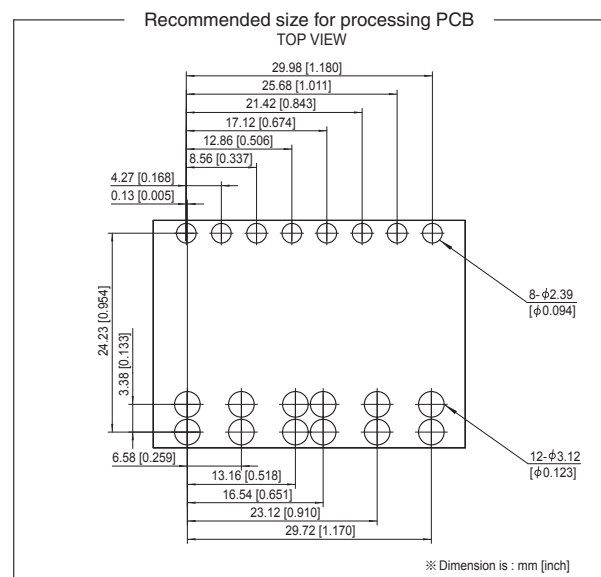
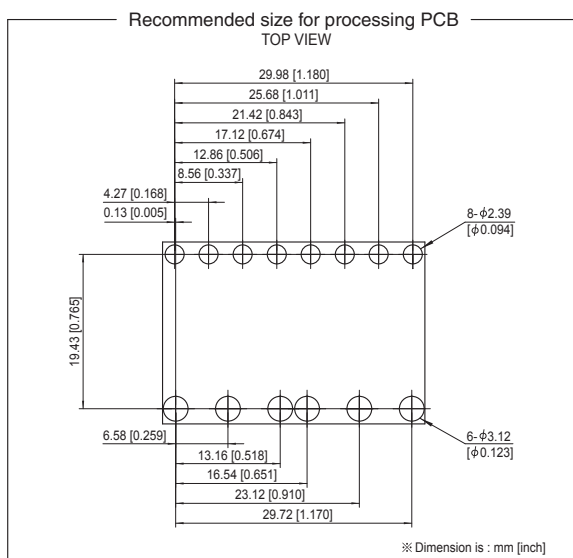


- ※ Tolerance : ±0.3 [±0.012]
- ※ Dimensions in mm, []=inches
- ※ Weight : 14g max
- ※ Terminal material : copper
- ※ Plating treatment of terminal : Lead free plating

8. BRFS150



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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cosel:

[BRFS50](#) [BRFS30](#) [BRFS40](#) [BRFS100](#) [BRFS50L](#) [BRFS60](#) [BRFS150](#) [BRFS120](#) [BRFS120-R](#) [BRFS150-R](#)