

# GU (Quick Contact TAB)

## Main Feature

1. GU Single contact Form (SPST) series Relay offers switching capacity by 30 Amps in small size for various kinds of applications.
2. Simple magnetic circuit to meet mass production for low cost offer. Standard type is open type without duct cover. In addition, dust cover and sealed cover types are available to meet customer's various requirements.
3. -SS Flow Solder Type (Dust Cover) is available for PC Board processing.
4. PC Board mounting & quick connect terminals can be used for various application.
5. Flanged Cover can be fixed by screw or by snap-in mounting track.



## Application

Domestic Appliances, Heating, Ventilating and Conditioning System, Car Control Switching Box, General Power Switching Applications.

## Contact Rating

- Nominal Load (Resistive Load  $\cos \varphi = 1$ )  
Contact Capacity
  - 1c (N/C) ..... 10A at 240VAC.  
10A at 30VDC.
  - (N/O) ..... 20A at 240VAC.  
20A at 30VDC.
  - 1a (DM Only) ..... 30A at 120VAC.  
30A at 240VAC.  
30A at 30VDC.
  - 1b (DB Only) ..... 10A at 240VAC.  
10A at 30VDC.
  - GU-DMJAC ..... 30A at 250VAC.  
30A at 12VDC.
  - Motor Load ..... 1-1/2HP at 240VAC.  
1/2HP at 240VAC.
- Rated Carrying Current ..... 1c :20 A. 1a :30A.
- Max. Allowable Current ..... 1c :20 A. 1a :30A.
- Max. Allowable Voltage ..... AC 250V.
- Max. Allowable Power Force 1c :4,800VA. 1a :7,200VA
- Min. Switching Load ..... DC 10V, 10mA.
- Contact Material ..... Ag Alloy
- Contact Form ..... SPDT & SPST.

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩMax. @1A,6VDC
- Operate Time ..... 15 mSec. Max.
- Release Time ..... 10 mSec. Max.
- Dielectric Strength :  
Between Coil & Contact ..... 1,500VAC at 50/60 Hz  
for one minute.

Between Contacts ..... 1,500VAC at 50/60 Hz  
for one minute.

- ....Insulation Resistance ..... 100 MeggaΩ Min. at  
500VDC
- Max. On/Off Switching :  
Electrical ..... 30 Ops per Minute.  
Mechanical ..... 300 Ops per Minute.
- Temperature Range ..... -30~155°C
- Humidity Range ..... 45~85% RH.
- Coil Temperature Rise ..... 60°C Max.
- Vibration :  
Endurance ..... 10 to 55 Hz dual  
amplitude width 1.5 mm.
- Error Operation ..... 10 to 55 Hz dual  
amplitude width 1.5 mm.
- Shock :  
Endurance ..... 1,000 m/S<sup>2</sup> Min.  
Error Operation ..... 50 m/S<sup>2</sup> Min.
- Life Expectancy :  
Mechanical ..... 10<sup>7</sup> Operations at No  
Load condition.  
Electrical ..... 10<sup>5</sup> Operations at Rated  
Resistive Load.
- Weight ..... About DMF : 34g  
DMFS : 34.6g  
DMQ : 32.6g

## Safety Standard & Its File Number

- C -UL ..... E141060.
- C -UL Class F Insulation System E181845.
- TÜV (12/24DMQ only) ..... R2057813

# GU (Quick Contact TAB)

## Coil Specification (at 20°C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
GU	5	185	27	Abt. 0.93	80% Maximum	5% Minimum	150% but for short time carrying current
	6	150	40				
	9	93	97				
	12	77	155				
	15	59	255				
	18	47	380				
	24	36	660				
	48	19.4	2,480				
	110	8.5	13,000				

## Ordering Information

GU	-	SS	-	1	12	D	M	F	S		
										<b>Case Type:</b>	<b>Nil:</b> Standard
											<b>S:</b> With Flanged Case
										<b>Terminal Type:</b>	<b>F:</b> Both PCB Terminal & Quick Contact Tabs (Case height: 28.0mm)
											<b>Q:</b> Both PCB Terminal & Quick Connect Tabs (Case height: 21.0mm)
											<b>J:</b> Quick Connect Tabs (Case height: 21.0mm)
										<b>Contact Form:</b>	<b>Nil:</b> One Form C
											<b>M:</b> One Form A
											<b>B:</b> One Form B
										<b>Coil Type:</b>	<b>D:</b> Standard DC Coil
										<b>Coil Voltage:</b>	<b>05:</b> 5V, <b>06:</b> 6V, <b>09:</b> 9V, <b>12:</b> 12V, <b>15:</b> 15V, <b>18:</b> 18V <b>24:</b> 24V, <b>48:</b> 48V, <b>110:</b> 110V
										<b>Number of Pole:</b>	<b>1:</b> One Pole
										<b>Type of Sealing:</b>	<b>S:</b> Hand Soldered Type
											<b>SS:</b> Flow Soldered Type
										<b>Type:</b>	<b>GU</b> (Quick Contact TAB)

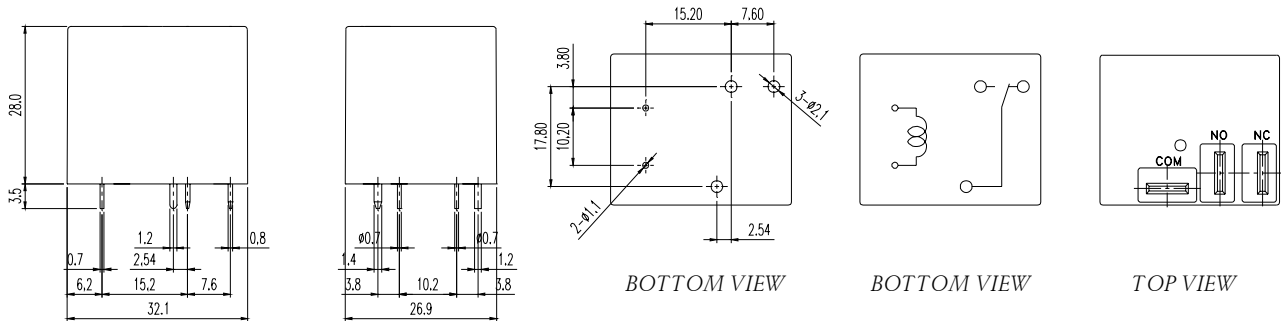
## Classification

Model	GU (Q-C-T)					
Terminal Type	F : PCB terminal & Quick Connect Tabs Case Height:28mm			Q : PCB terminal & Quick Connect Tabs Case Height:21mm		
Case Type	Nil : Standard Case		S : (With Flanged Case)	Nil : Standard Case		
Contact Form	1C	1A	1B	1C	1A	1B
Hand Soldered	GU-S-1□□DF(S)	GU-S-1□□DMF(S)	GU-S-1□□DBF(S)	GU-S-1□□DQ	GU-S-1□□DMQ	GU-S-1□□DBQ
Flow Soldered	GU-SS-1□□DF(S)	GU-SS-1□□DMF(S)	GU-SS-1□□DBF(S)	GU-SS-1□□DQ	GU-SS-1□□DMQ	GU-SS-1□□DBQ

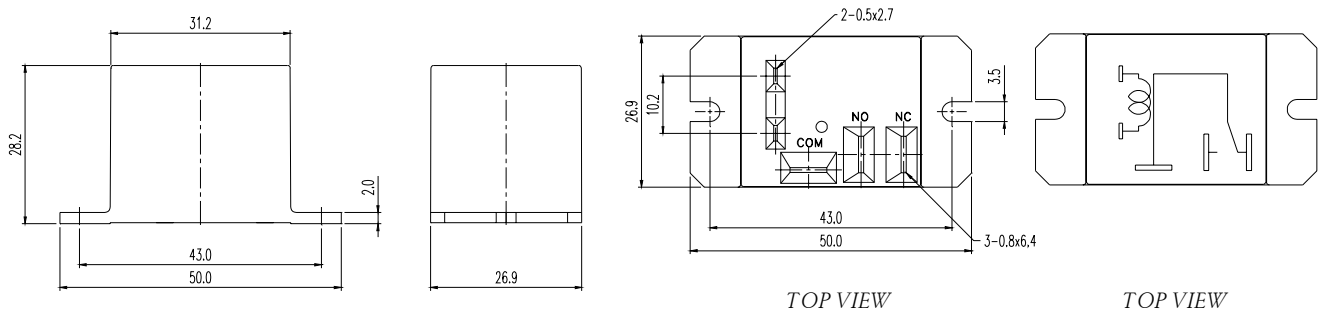
# GU (Quick Contact TAB)

## Dimension

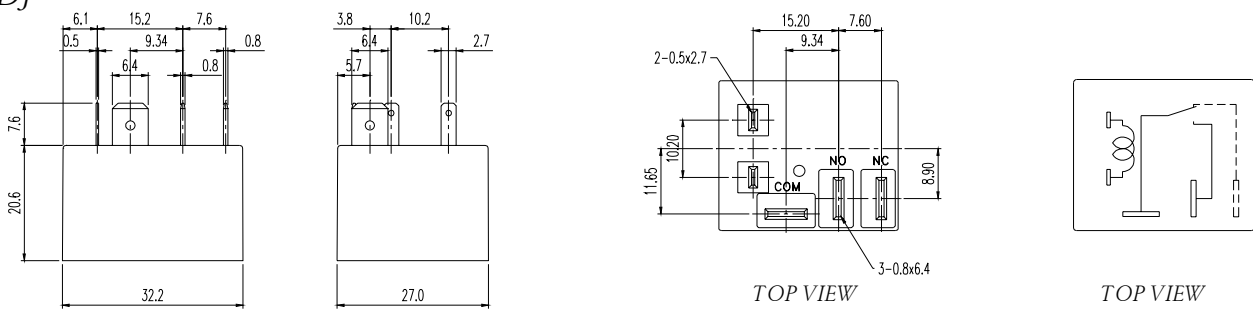
### GU-DF



### GU-DFS



### GU-DJ



### GU-DQ

