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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

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Wiring \& Adjustment Diagrams
DELAY-ON-MAKE \& RECYCLING


SINGLE SHOT, INTERVAL \& DELAY-ON-BREAK


## $\mathrm{V}=$ Voltage

L = Load
$\mathrm{J}=$ Wire Required for Interval Operation
S1= Initiate Switch
UTL = Optional Untimed Load

ADJUSTMENTS

| DOM | $\begin{aligned} & \mathrm{A} \square \\ & \mathrm{~B} \square \end{aligned}$ |
| :---: | :---: |
| SS | $A \square$ |
| R | $\begin{aligned} & \mathrm{A} \square \square \\ & \mathrm{~B} \square \end{aligned}$ |
| DOB | $\begin{aligned} & \mathrm{A} \square \\ & \mathrm{~B} \square \end{aligned}$ |

DOM = Delay-on-Make
SS = Single Shot/Interval
R = Recycling
DOB = Delay-on-Break

| R | M | S | I |
| :---: | :---: | :---: | :---: |
| $0.1-6.3 \mathrm{~s}$ | X 0.1 s | $\mathrm{C} \square \mathrm{E}$ <br> $\mathrm{D} \square \mathrm{F}$ | 0.1 s |
| $1-63 \mathrm{~s}$ | X 1 s | $\mathrm{C} \square \mathrm{E}$ <br> $\mathrm{D} \square \mathrm{F}$ | 1 s |
| $10-630 \mathrm{~s}$ | X 10 s | $\mathrm{C} \square \mathrm{E}$ <br> $\mathrm{D} \square \mathrm{F}$ | 10 s |
| $1-63 \mathrm{~m}$ | X 1 m | $\mathrm{C} \square \mathrm{E}$ <br> $\mathrm{D} \square \mathrm{F}$ | 1 m |

R = Range
M = Multiplier
S = Setting
I = Increments of time


Add switches in ON position TD $=2+8+16=26$

## Description

The DSQU and DSTU Series of 17.5 mm , switch adjustable, universal solid-state timers offer multiple functions, voltages, and time delay ranges. Choose one of 5 functions and 4 time delay ranges via 4 selection switches located on face of the unit. Six switches adjust the time delay through the selected range.
The DSQU Series has quick connect terminals and the DSTU Series has terminal blocks.

## Features \& Benefits

| FEATURES | BENEFITS |
| :--- | :--- |
| Universal AC or <br> DC voltage | Choose from 24 to 240VAC or 9 to 110VDC models |
| Compact $\mathbf{1 7 . 5 m m}$ size | Allows for high rail density |
| Microcontroller based | Repeat Accuracy +/-1\% |
| Multifunction: <br> $\mathbf{5}$ timing functions | Reduce stocking requirements |
| Knob Adjustable <br> Time Delay | Field adjustable delay ranging from 0.1s - 100m |
| 0.7A steady, 10A inrush <br> solid-state output | Provides 100 million operations in typical conditions. |
| Mounting fasteners <br> included | Each unit ships with both surface and DIN rail quick <br> mount adapters |
| Watchdog circuitry | Self monitoring and self correcting for <br> improved performance |

## Accessories

| P1015-13 (AWG 10/12), P1015-64 (AWG 14/16), |
| :--- |
| P1015-14 (AWG 18/22) Female Quick Connect <br> These 0.25 in. (6.35 mm) female terminals are <br> constructed with an insulator barrel to provide <br> strain relief. |

## Ordering Information

| MODEL | INPUT VOLTAGE | CONNECTION |
| :--- | :--- | :--- |
| DSQUA3 | $24-240 V A C$ | Quick Connects |
| DSQUD3 | $9-110$ VDC | Quick Connects |
| DSTUA3 | $24-240$ VAC | Terminal Blocks |
| DSTUD3 | $9-110 \mathrm{VDC}$ | Terminal Blocks |

[^0]Specifications

| Time Delay |  |
| :---: | :---: |
| Type | Microcontroller based with ceramic resonator and watchdog circuitry |
| Adjustment | 6 switches adjust the time delay; |
|  | 2 switches select 1 of 4 multipliers |
| Range* | $x 0.1 s=0.1-6.3 s$ in 0.1 s increments |
|  | $x 1 s=1-63 s$ in 1 s increments |
|  | $\mathrm{x10s}=10-630 \mathrm{~s}$ in 10s increments |
|  | $\mathrm{x} 1 \mathrm{~m}=1-63 \mathrm{~m}$ in 1 m increments |
| Repeat Accuracy | $\pm 0.1 \%$ or $\pm 20 \mathrm{~ms}$, whichever is greater |
| Setting Accuracy | $\pm 2 \%$ or $\pm 50 \mathrm{~ms}$, whichever is greater |
| Reset Time | $\leq 300 \mathrm{~ms}$ |
| Initiate Time | Single Shot \& Delay-on-Break: $\leq 32 \mathrm{~ms}$ |
| Time Delay vs Temp. |  |
| \& Voltage | $\pm 2 \%$ or $\pm 50 \mathrm{~ms}$, whichever is greater |
| Input |  |
| Voltage | AC: 24 to 240VAC; -20\% - 10\% |
|  | DC: 9 to 110VDC; -0\%-20\% @ -25 ${ }^{\circ} \mathrm{C}$ |
|  | 9.4 to 110VDC; -0\% - $20 \%$ @ -40 ${ }^{\circ} \mathrm{C}$ |
| AC Line Frequency/DC Ripple | $50 / 60 \mathrm{~Hz}$ / $\leq 10 \%$ |
| Output |  |
| Type | Solid state |
| Form | NO |
| Rating | 0.7A steady state, 10A inrush |
| Voltage Drop | $\mathrm{AC} \cong 2.5 \mathrm{~V} @ 0.7 \mathrm{~A} ; \mathrm{DC} \cong 1.5 \mathrm{~V} @ 0.7 \mathrm{~A}$ |
| Protection |  |
| Surge | IEEE C62.41-1991 Level A |
| Circuitry | Encapsulated |
| Dielectric Breakdown | $\geq 2000 \mathrm{~V}$ RMS terminals to mounting surface |
| Polarity | DC units are reverse polarity protected |
| Mechanical |  |
| Mounting | Two base adaptors are available |
| DIN Rail | Snap on to 32 mm DIN 1 \& 35 mm DIN 3 rail |
| Surface | Two \#6 (M3.5 x 0.6 ) screws or quick mount fasteners |
| Dimensions | $\begin{aligned} & \text { H } 76.2 \mathrm{~mm}\left(3.0^{\prime \prime}\right) \text {; W } 17.52 \mathrm{~mm}\left(0.69^{\prime \prime}\right) \text {; } \\ & \text { D } 61.2 \mathrm{~mm}\left(2.41^{\prime \prime}\right) \end{aligned}$ |
| Termination |  |
| DSQU | 0.25 in . ( 6.35 mm ) male quick connect terminals |
| DSTU | 0.197 in. ( 5 mm ) push-on terminal blocks for up to \#14 AWG ( $2.5 \mathrm{~mm}^{2}$ ) wire |
| Environmental |  |
| Operating/Storage |  |
| Temperature | $-40^{\circ}$ to $60^{\circ} \mathrm{C} /-40^{\circ}$ to $85^{\circ} \mathrm{C}$ |
| Humidity | $95 \%$ relative, non-condensing |
| Weight | $\cong 4.2 \mathrm{oz}(119 \mathrm{~g})$ |

## Mounting Diagrams



[^1]
[^0]:    If you don't find the part you need, call us for a custom product 800-843-8848

[^1]:    *For CE approved applications, power must be removed from the unit when a switch position is changed.

