# imall

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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# Series DLB



Panel Mount Power Rated Pushbutton Switches

Сар		AT417	<b>AT418</b>	AT419	AT446
Lamp	<u> </u>	<b>0</b> AT604	AT604N	<b>AT463</b>	AT464
Basic Switch	N DLB 2141 N C		Basic Switch DLB2141W01 DLB2141W03 DLB2145W01 DLB2145W03	AT517	<b>AT528</b>

# **GENERAL SPECIFICATIONS**

### **Electrical Capacity (Resistive Load)**

Power Level (Silver Contacts): 5A @ 125V AC or 3A @ 250V AC or 30V DC

## **Other Ratings**

Contact Resistance:	10 milliohms maximum
Insulation Resistance:	200 megohms minimum @ 500V DC
Dielectric Strength:	1,000V AC minimum between contacts; 1,500V AC minimum between contacts & case
Mechanical Life:	30,000 operations minimum
Electrical Life:	10,000 operations minimum
Nominal Operating Force:	1,300 grams for momentary; 1,200 grams for alternate action
Travel:	1.0mm (.039") pretravel; 4.0mm (.157") overtravel; 5.0mm (.196") total travel

## **Materials & Finishes**

Caps:	Polycarbonate
Plunger:	Polyacetal resin
Bushing:	Brass with chrome plating
Housing:	Steel, chromate over zinc
Movable Contact:	Silver
Stationary Contacts:	Silver with silver plating
Base:	Phenolic resin
Common Terminals:	Copper with silver plating
End Terminals:	Copper with silver plating
Lamp Terminals:	Brass with nickel plating

### **Standards & Certifications**

UL Recognized:

All models recognized at 5A @ 125V AC; UL File No. E44145 Add "/U" to end of part number to order UL mark on switch.

# Series DLB



Panel Mount Power Rated Pushbutton Switches

			BASIC SWI	ТСН		
		Plunger Positio	<b>n</b> ( ) = Momentary	Connected	l Terminals	Terminals
Model	Pole	Normal	Down	Normal	Down	Terminal numbers are not actually on the switch.
DLB2141W01 DLB2141W03 DLB2145W01 DLB2145W03	DP	ON ON ON	(ON) (ON) ON ON	2-3 5-6	2-1 5-4	Solder Lug Straight PC Solder Lug Straight PC
Power/Lamp S	Throw & Schematics	DPDT 3	2 (COM) 5     1 6 ●	€ 4	(+) • (-) L	Lamp circuit is isolated and requires external power source.
- + + + + + + + + + + + + + + + + + + +	Keyway M12 P1 M12 P1 (15.0) (12.0) (15.0) (12.0) (472)	(0.9) × (2.0) Ty (0.9) × (2.0) Ty (0.7) Typ (0.7) Typ (0		$ \begin{array}{c} .677 \\ \downarrow \\ 41 \text{ Typ} \\ 4 \\ p \end{array} $ Panel Th 6.5mm	ickness:	AT418
$\begin{array}{c} & & & & & & \\ (2.0)^{\dagger} & & & & \\ 0.79 & & & & \\ 0.35 & & & & \\ 0.35 & & & & \\ Thk = (0.7) \\ 0.28 \end{array}$	one solid 20 or two solid 22-gauge w	commodate one	$\frac{1}{189} = \frac{1}{120} $	+ 1 = - + 1 = - + 1 = 2 - + - + + + + + + + + + + + + + + + + +	AT508 <sup>p</sup> (14.4) 567 AT527 Hex Nut. <sup>yp</sup> betail in Ac & Hardwar	ccessories re section

# LAMPS & ELECTRICAL SPECIFICATIONS

Electrical specifications are determined at a basic temperature of 25°C. Lamp circuit is independent of switch operation. The ballast resistor calculation and more lamp detail are shown in the Supplement; see Supplement Index (page Z1).

	Incandescent	& Neon Lamps for Ca	ps AT419, AT417, AT4	418, & AT446		
Part Number	Lamp Type	Voltage	Current	Endurance		
AT604-6V	Incandescent	6V	200mA	1,000 hours	T-1 ¾	
AT604-14V	Incandescent	14V	80mA	750 hours	Midget	- 8
AT604-28V	Incandescent	28V	40mA	1,000 hours	Groove Base	0
AT604N	Neon	110V	1.5mA	10,000 hours		
	Neon					,

Use Neon with AT417 & AT418 white caps only. Recommended Resistors: 33K ohms for 110V AC; 100K ohms for 220V AC

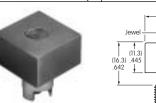
Single Element LED in Spot Illuminated Black	Opaque Cap
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	<b>3</b>						
Part Number	LED Color & Cap Description	Forward Peak Current	Continuous Fwd Current	Forward Voltage	Reverse Peak Voltage	Current Reduction Above 25°C	
AT463C	Red LED in Square Cap	35mA	25mA	1.65V	3V	0.57mA/°C	
AT463F	Green LED in Square Cap	30mA	20mA	2V	3V	0.43mA/°C	
AT464C	Red LED in Round Cap	35mA	25mA	1.65V	3V	0.57mA/°C	
AT464F	Green LED in Round Cap	30mA	20mA	2V	3V	0.43mA/°C	

19.0) Sq

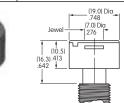
### AT463

Can be combined with Square Mounter AT517.



# **AT464**

Can be combined with Round Mounter AT528.



# Series DLB



### Panel Mount Power Rated Pushbutton Switches

CAP TYPES & COLORS							
			Part Number	Сар	Color		
AT410	(19.0) Sq		AT419B	.748" Square	White		
AT419		Can be	AT419C	.748" Square	Red		
	(10.0) (15.0) .394 .591 +	used	AT419D	.748" Square	Orange		
	.591 +	with	AT419E	.748" Square	Yellow		
	* <b>*</b>	Square	AT419F	.748" Square	Green		
1		Mounter	AT419G	.748" Square	Blue		
AT 417	(8.8) Dia		AT417B	.346" Diameter	White		
AT417			AT417C	.346" Diameter	Red		
	13 0		AT417D	.346" Diameter	Orange		
	(13.0) .512		AT417E	.346" Diameter	Yellow		
			AT417F	.346" Diameter	Green		
			AT417G	.346" Diameter	Blue		
AT418	(13.0) Dia 512		AT418B	.512" Diameter	White		
A1410			AT418C	.512" Diameter	Red		
	(10.0) (15.0) .394 .591		AT418D	.512" Diameter	Orange		
			AT418E	.512" Diameter	Yellow		
100			AT418F	.512" Diameter	Green		
-			AT418G	.512" Diameter	Blue		
AT446	(19.0) Dia .748 →	Can be	AT446	.748" Diameter			
Lens — Holder —		used with Round Mounter	Black opaque holde lenses are provided	r; white, red, green, & blu	ve translucent		

# **OPTIONAL SNAP-IN MOUNTERS**

Panel Thickness: 1.0 ~ 4.0mm (.039 ~ .157")

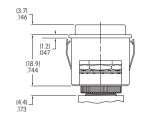
#### AT517A

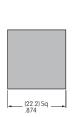
### **Mounter for Square Caps**

Provided with assembly instructions

Material: Fiberglass reinforced nylon









Panel Cutout

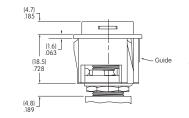
DLB2145W01 with Cap AT419 & Square Mounter

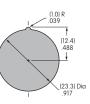
AT528A

Mounter for .748" Round Caps

Provided with assembly hardware and instructions

Material: Fiberglass reinforced nylon





Panel Cutout

Panel Thickness: 1.0 ~ 4.0mm (.039 ~ .157")



DLB2145W01 with Cap AT446 & Round Mounter