

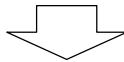
●EXTERNAL RESISTOR ★19×26mm Rect. Button
Before Change

	Full-Face															Split-Face																				
	R			G			Y			SB			SW			SG			R			G			Y			SB			SW			SG		
	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V
Max operating current IFM(mA)	80	40	20	80	40	20	80	40	20	100	50	25	100	50	25	100	50	25	40	20	40	20	40	20	50	25	50	25	50	25	50	25				
DC reverse voltage VR(V)	8	16	32	8	16	32	8	16	32	5	10	20	5	10	20	5	10	20	8	16	8	16	8	16	5	10	5	10	5	10	5	10				
Forward voltage VF(V)	3.6	7.2	14.4	4.4	8.8	17.6	4	8	16	3.2	6.4	12.8	3.2	6.4	12.8	3.2	6.4	12.8	3.6	7.2	4	8.8	4	8	3.2	6.4	3.2	6.4	3.2	6.4	3.2	6.4				
Recommended operating current IF(mA)	30	15	8	55	30	17	35	18	10	45	23	13	45	23	13	33	18	10	15	8	30	15	8	9	25	13	20	10	18	10	10					
Current Reduced Factor	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4				

	Dual-Color																							
	RGY combination						R,Y and SB, SW, SG combination						SB, SW, SG combination											
	R		G		Y		R		Y		SB		SW		SG		SB		SW		SG			
	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V
Max operating current IFM(mA)	80	40	20	80	40	20	80	40	20	80	40	20	100	50	25	100	50	25	100	50	25	100	50	25
DC reverse voltage VR(V)	8	16	32	8	16	32	8	16	32	8	16	32	5	10	20	5	10	20	5	10	20	5	10	20
Forward voltage VF(V)	3.6	7.2	14.4	4.4	8.8	17.6	4	8	16	3.6	7.2	14.4	4	8	16	3.2	6.4	12.8	3.2	6.4	12.8	3.2	6.4	12.8
Recommended operating current IF(mA)	30	15	8	55	30	17	35	18	10	30	15	8	35	18	10	45	23	13	37	20	10	33	18	10
Current Reduced Factor	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4	1.6	0.8	0.4

	3-Split-Face												4-Split-Face				
	R, G, Y						SB, SW, SG						RGY	SB,SW,SG			
	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V		
Max operating current IFM(mA)	20	20	40	20	20	20	25	25	50	25	25	25	25	25	20	25	
DC reverse voltage VR(V)	8	8	8	8	8	16	5	5	5	5	5	10	5	5	10	8	5
Forward voltage VF(V)	3.8	3.8	3.8	3.8	3.8	7.6	3.1	3.1	3.1	3.1	3.1	6.2	3.1	3.1	6.2	3.8	3.1
Recommended operating current IF(mA)	8	8	16	8	8	8	8	8	8	8	8	16	8	8	8	8	8
Current Reduced Factor	0.33	0.66	0.33	0.33	0.33	0.4	0.8	0.4	0.4	0.4	0.33	0.4	0.33	0.4	0.33	0.4	

Please be sure to use the appropriate resistor.
After Change



	Full-Face															Split-Face																				
	R			G			Y			SB			SW			SG			R			G			Y			SB			SW			SG		
	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V			
Max operating current IFM(mA)	80	40	20	80	40	20	80	40	20	80	40	20	80	40	20	80	40	20	40	20	40	20	40	20	40	20	40	20	40	20	40	20				
DC reverse voltage VR(V)	8	16	32	8	16	32	8	16	32	8	16	32	5	10	20	5	10	20	5	10	20	8	16	8	16	8	16	5	10	5	10	5	10			
Forward voltage VF(V)	3.6	7.2	14.4	4.2	8.4	16.8	3.6	7.2	14.4	2.9	5.8	11.6	2.9	5.8	11.6	3	6	12	3.6	7.2	4.2	8.4	3.6	7.2	2.9	5.8	2.9	5.8	3	6	3	6				
Recommended operating current IF(mA)	30	15	8	70	30	17	45	18	10	45	23	13	37	20	10	33	18	10	15	8	30	15	18	9	25	13	20	10	18	10	10					
Current Reduced Factor	1.4	0.7	0.4	1.4	0.7	0.4	1.4	0.7	0.4	1.1	0.6	0.3	1.1	0.6	0.3	1.1	0.6	0.3	0.7	0.4	0.7	0.4	0.7	0.4	0.6	0.3	0.6	0.3	0.6	0.3	0.6	0.3				

	Dual-Color																							
	RGY combination						R,Y and SB, SW, SG combination						SB, SW, SG combination											
	R		G		Y		R		Y		SB		SW		SG		SB		SW		SG			
	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V
Max operating current IFM(mA)	80	40	20	80	40	20	80	40	20	80	40	20	80	40	20	80	40	20	80	40	20	80	40	20
DC reverse voltage VR(V)	8	16	32	8	16	32	8	16	32	8	16	32	5	10	20	5	10	20	5	10	20	5	10	20
Forward voltage VF(V)	3.6	7.2	14.4	4.2	8.4	16.8	3.6	7.2	14.4	2.9	5.8	11.6	2.9	5.8	11.6	3	6	12	2.9	5.8	11.6	2.9	5.8	11.6
Recommended operating current IF(mA)	30	15	8	70	30	17	45	18	10	30	15	8	45	18	10	45	23	13	37	20	10	33	18	10
Current Reduced Factor	1.4	0.7	0.4	1.4	0.7	0.4	1.4	0.7	0.4	1.4	0.7	0.4	1.1	0.6	0.3	1.1	0.6	0.3	1.1	0.6	0.3	1.1	0.6	0.3

	3-Split-Face												4-Split-Face				
	R, G, Y						SB, SW, SG						RGY	SB,SW,SG			
	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V	5V	12V	24V		
Max operating current IFM(mA)	20	20	40	20	20	20	20	20	40	20	20	20	20	20	20	20	
DC reverse voltage VR(V)	4	4	4	4	8	8	8	8	8	5	5	5	5	5	10	8	5
Forward voltage VF(V)	3.8	3.8	3.8	3.8	3.8	7.6	2.9	2.9	2.9	2.9	2.9	5.8	2.9	2.9	5.8	3.8	2.9
Recommended operating current IF(mA)	10	10	20	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Current Reduced Factor	0.4	0.7	0.4	0.4	0.4	0.3	0.6	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	