

# LIGHTING

## RECOMMENDED DEVICES

### COMPACT FLUORESCENT LAMP (CFL)

Mains	5W	10W	20W	> 20W
110V	BULT118	BULT118 BULK128/D▲ BUL128/D▲	BULT118 BULK128/Ds BUL128/Ds BUL381/2	BUL381/2 BUL381D/2D BUL138
220V			BUL381D/2D BUL138	
110V	STK4N25 STD4N25-1	STK4N25 STD4N25-1	STP5N30 STD5N30L-1	STP5N30 STD5N30L-1
▲ L6569/A - Halfbridge Drive Package DIP8/SO8				
220V	STD1NA60-1 STD2NA60-1	STD1NA60-1 STD2NA60-1 STP3NA60-1	STD1NA60-1 STD2NA60-1 STP3NA60-1	STD2NA60-1 STP3NA60-1
▲ L6569/A - Halfbridge Drive Package DIP8/SO8				

▲ New Device

### POWER FACTOR CORRECTION (PFC)

Mains	Power	Type	Description	Package*
120V	9-40W	L6560	PFC - Controller	DIP8/SO8
	9-40W	STP5N30	PMOS 300V 1.4Ω	TO220
	9-40W	STP4NA40	PMOS 400V 2.1Ω	TO220
	9-40W	STP8NA40	PMOS 400V 0.8Ω	TO220
	9W	STTB106U	Diode 600V 1A	SOD6
	40W	STTB406	Diode 600V 4A	DO201-AD
220V	9-40W	L6560	PFC-Controller	DIP8/SO8
	9-40W	STP5NA50	PMOS 500V 1.6Ω	TO220
	9-40W	STP8NA50	PMOS 500V 0.85Ω	TO220
	9-40W	STP9NA50	PMOS 500V 0.8Ω	TO220
	9-40W	STP4NA60	PMOS 600V 2.2Ω	TO220
	9-40W	STP6NA60	PMOS 600V 1.2Ω	TO220
	9-40W	STTB106U	Diode 600V 1A	SOD6
	9-40W	STTB406	Diode 600V 4A	DO201-AD

\* Other Packages options are available

### BIPOLAR TRANSISTORS

Type	V <sub>CEs</sub> [V]	I <sub>c</sub> [A]	Package*
BULT118	700	2	SOT32
BULK128/D	700	3	SOT82
BUL128/D	700	3	TO220
BUL381/2	800	2	TO220
BUL381D/2D	800	2	TO220
BUL138	800	4	TO220

Suffix-D: diode incorporated

### POWER MOS TRANSISTORS

Type	V <sub>DSS</sub> [V]	R <sub>DS(on)</sub> [Ω]	Package*
STD4N25-1	250	1.1	IPAK
STK4N25	250	1.1	SOT82
STD5N30-1	300	1.4	IPAK
STD5N30L-1	300	1.4	IPAK
STD1NA60-1	600	8.0	IPAK
STD2NA60-1	600	4.0	IPAK
STP3NA60	600	4.0	TO220

### DIODES

Type	I <sub>r(AV)</sub> [A]	V <sub>rrm</sub> [V]	Package
STTA106U	1	600	SOD6
STTA206S	2	600	SOD15
STTB406	4	600	DO201-AD

# LIGHTING

## RECOMMENDED DEVICES

### ELECTRONIC TRANSFORMER

Mains	50W	100W	150W	200W	> 200W
110V	BUL38D BULT118 STD3N30-1 STP4NA40	BUL58D BUL510 STD3N30-1 STP4NA40 STP7NA40	BUL67 STP5N30 STP4NA40 STP7NA40	BUL87 STP5N30 STP7NA40 STP8NA40	BUL810 STP9N30 STP8NA40 STP10NA40
240V	BUL58D BUL510 STK2N50 STD3N50-1 STP3NA60	BUL67 STD3N50-1 STP5N50 STP4NA60	BUL87 STP6NA50 STP5N60	BUL810 STP8NA50 STP6NA60	STP9NA50 STP7NA60

### POWER FACTOR CORRECTION (PFC)

Mains	Power	Type	Description	Package*	
120 V	← 200W	L6560	PFC - Controller	DIP8/SO8	
	50W	STP5N30	PMOS 300V 1.4Ω	TO220	
	100-220W	STP9N30	PMOS 300V 0.55Ω	TO220	
	50-100W	STP4NA40	PMOS 400V 2.1Ω	TO220	
	100-200W	STP7NA40	PMOS 400V 1.0Ω	TO220	
	100-200W	STP8NA40	PMOS 400V 0.8Ω	TO220	
	100-200W	STP10NA40	MOS 400V 0.55Ω	TO220	
	50-100W	STTA106U	Diode 600V 1A	SOD6	
	100-150W	STTA206S	Diode 600V 2A	SOD15	
	100-200W	STTB406	Diode 600V 4A	DO201-AD	
	220V	← 200W	L6560	PFC-Controller	DIP8/SO8
		50-100W	STP5NA50	PMOS 500V 1.6Ω	TO220
50-150W		STP6NA50	PMOS 500V 1.1Ω	TO220	
100-200W		STP8NA50	PMOS 500V 0.85Ω	TO220	
100-200W		STP9NA50	PMOS 500V 0.8Ω	TO220	
50-100W		STP4NA60	PMOS 600V 2.2Ω	TO220	
50-150W		STP5NA60	PMOS 600V 1.6Ω	TO220	
100-20W		STP6NA60	PMOS 600V 1.2Ω	TO220	
100-200W		STP7NA60	PMOS 600V 1.0Ω	TO220	
50-100W		STTA106U	Diode 600V 1A	SOD6	
100-150W		STTA206S	Diode 600V 2A	SOD15	
100-200W		STTB406	Diode 600V 4A	DO201-AD	

\* Other Package options are available  
(e.g.: insulated; surface mount)

### POWER MOS TRANSISTORS

Type	V <sub>DSS</sub> [V]	R <sub>DS(on)</sub> [Ω]	Package
STD3N30-1	300	1.40	IPAK
STP5N30	300	1.40	TO220
STP9N30	300	0.55	TO220
STP4NA40	400	1.80	TO220
STP7NA40	400	1.00	TO220
STP8NA40	400	0.80	TO220
STP10NA40	400	0.55	TO220
STK2N50	500	6.00	SOT82
STD3N50-1	500	3.00	IPAK
STP3NA50	500	3.00	TO220
STP5NA50	500	1.60	TO220
STP6NA50	500	1.10	TO220
STP8NA50	500	0.85	TO220
STP8NA50	500	0.80	TO220
STP3NA60	600	4.00	TO220
STP4NA60	600	2.20	TO220
STP5NA60	600	1.60	TO220
STP6NA60	600	1.20	TO220
STP7NA60	600	1.00	TO220

### BIPOLAR TRANSISTORS

Type	V <sub>CES</sub> [V]	I <sub>c</sub> [A]	Package*
BUL67	700	8	TO220
BUL87	700	5	TO220
BULT118	700	4	SOT-32
BUL38D	800	2	TO220
BUL58D	800	8	TO220
BUL510	1000	8	TO-220
BUL810	1000	5	TO-218

### DIODES

Type	I <sub>r(AV)</sub> [A]	V <sub>rrm</sub> [V]	Package*
STTA106U	1	600	SOD6
STTA206S	2	600	SOD15
STTB406	4	600	DO201-AD

# LIGHTING

## RECOMMENDED DEVICES

### INDUSTRIAL LAMP BALLAST

Mains	20W	40W	80W	110W	> 110W
110V	BULT118 BUL138/B BUL381/2D BUL381/2 STP7NA40 STP5N30	BULT118 BUL138/B BUL381D BUL381 STP7NA40 STP5N30 STP9N30	BULT118 BUL138/B BUL381D BUL381 STP7NA40 STP5N30 STP9N30	BUL138/B BUL57 BUL58D STP7NA40 STP9N30	BUL57 BUL58D STP8NA40 STP9N30
220V	BULT118 BUL128/D BUL138 BUL381D BUL381 BUL382 BUL310  STP3NA50	BUL138 BUL381D BUL381 BUL382 BUL310 STP3NA50 STP5NA50	BUL138 BUL381D BUL381 BUL382 BUL310 BUL410 STP3NA50 STP5NA50	BUL138 BUL57 BUL58D BUL67 BUL310 BUL410 BUL510 STP3NA50 STP5NA50	BUL57 BUL58D BUL67 BUL410 BUL510 STP5NA50
277V	BUL310  BUL213 BUL216	BUL310  BUL213 BUL216	BUL310 BUL410 BUL213 BUL216	BUL310 BUL410 BUL510 BUL216 BUL416	BUL410 BUL510 BUL216 BUL416

### POWER FACTOR CORRECTION (PFC)

Mains	Power	Type	Description	Package*
120V	< 200W	L6560	PFC - Controller	DIP8/SO8
	20-80W	STP5N30	PMOS 300V 1.4Ω	TO220
	40-110W	STP9N30	PMOS 300V 0.55Ω	TO220
	20-40W	STP4NA40	PMOS 400V 2.1Ω	TO220
	20-110W	STP7NA40	PMOS 400V 1.0Ω	TO220
	> 110W	STP8NA40	PMOS 400V 0.8Ω	TO220
	20-40W	STTA106U	Diode 600V 1A	SOD6
	20-80W	STTA206S	Diode 600V 2A	SOD15
	80-110W	STTB406	Diode 600V 4A	DO201-AD
	220V	< 200W	L6560	PFC-Controller
20-80W		STP5NA50	PMOS 500V 1.6Ω	TO220
20-80W		STP6NA50	PMOS 500V 1.1Ω	TO220
40-110W		STP8NA50	PMOS 500V 0.85Ω	TO220
40-110W		STP9NA50	PMOS 500V 0.8Ω	TO220
20-80W		STP4NA60	PMOS 600V 2.2Ω	TO220
20-80W		STP5NA60	PMOS 600V 1.6Ω	TO220
40-110W		STP6NA60	PMOS 600V 1.2Ω	TO220
40-110W		STP7NA60	PMOS 600V 1.0Ω	TO220
20-40W		STTA106U	Diode 600V 1A	SOD6
20-80W		STTA206S	Diode 600V 2A	SOD15
80-110W		STTB406	Diode 600V 4A	DO201-AD

\* Other Packages options are available

# LIGHTING

## RECOMMENDED DEVICES

### POWER MOS TRANSISTORS

Type	V <sub>DSS</sub> [V]	R <sub>DS(on)</sub> [Ω]	Package*
STP5N30	300	1.40	TO220
STP9N30	300	0.55	TO220
STP4NA40	400	1.80	TO220
STP7NA40	400	1.00	TO220
STP8NA40	400	0.80	TO220
STP3NA50	500	3.00	TO220
STP5NA50	500	1.60	TO220
STP6NA50	500	1.10	TO220
STP8NA50	500	0.85	TO220
STP9NA50	500	0.80	TO220
STP4NA60	600	2.20	TO220
STP5NA60	600	1.60	TO220
STP6NA60	600	1.20	TO220
STP7NA60	600	1.00	TO220

### BIPOLAR TRANSISTORS

Type	V <sub>CES</sub> [V]	I <sub>c</sub> [A]	Package*
BULT118	700	1	SOT32
BUL128	700	3	TO220
BUL138	800	4	TO220
BUL381	800	2	TO220
BUL382	800	2	TO220
BUL381D	800	2	TO220
BUL57	700	7	TO220
BUL58D	800	8	TO220
BUL67	700	8	TO220
BUL310	1000	5	TO220
BUL410	1000	7	TO220
BUL510	1000	8	TO220
BUL213	1300	3	TO220
BUL216	1600	4	TO220
BUL416	1600	6	TO220

### LIGHT DIMMERS

Type	Voltage (V)	Current (A)	Package	Type	Appl.
BTA08xxxSW	400/600/700	8	Isolated TO-220	1	TD
BTA12xxxSW	400/600	12	Isolated TO-220	1	TD
BTA08xxxCW	400/600/800	8	Isolated TO-220	2	TD
BTA10xxxCW	400/600/800	10	Isolated TO-220	2	TD
BTA12xxxCW	400/600/800	12	Isolated TO-220	2	TD
T8yy-xxxW	400/600/700	8	ISOWATT220	2	TD
T10yy-xxxW	400/600/700	10	ISOWATT220	2	TD
T12yy-xxxW	400/600/700	12	ISOWATT220	2	TD
T4yy-xxxD	400/600/700	4	SOT82	1	SD
T4yy-xxxK	400/600/700	4	SOT194	1	SD
T4yy-xxxW	400/600/700	4	ISOWATT220	1	SD
Z04yyxE	400/600/700	4	TO202	3	SD
DB3	32-36		DO35	6	SD
TMMDB3	32-36		Minimelf	6	SD
BTA06xxxGP	400/600	6	Isolated TO-220	5	PD
BTA10xxxGP	400/600	10	Isolated TO-220	5	PD
BTA10xxxBW	400/600/700	10	Isolated TO-220	2	PD
BTA12xxxBW	400/600/700	12	Isolated TO-220	2	PD
T1030-xxxW	400/600/700	10	ISOWATT220	2	PD
T1230-xxxW	400/600/700	12	ISOWATT220	2	PD
DB3	32-36		DO35	6	PD
DB4	40-45		DO35	6	PD
TMMDB3	32-36		Minimelf	6	PD
TMMDB4	40-45		Minimelf	6	PD

### DIODES

Type	I <sub>r(AV)</sub> [A]	V <sub>r(rm)</sub> [V]	Package*
STTA106U	1	600	SOD6
STTA206S	2	600	SOD15
STTB406	4	600	DO201-AD

\* other package options are available  
(e.g.: insulated, surface mount)

Type:

- 1 = Sensitive, SNUBBERLESS Triac
- 2 = SNUBBERLESS Triac
- 3 = Standard Triac
- 4 = Triac
- 5 = Specific Triac.
- 6 = Diac

xxx - VDRM/VRRM voltage: 400/600/700/800 (V)

yyy - IGT sensitivity: 3/5/10/20/25/30/35/50 mA max for Triac

Applications:

- TD = Touch Light Dimmer
- PD = Potentiometer Light Dimmer
- SD = Small Light Dimmer



# LIGHTING

## RECOMMENDED DEVICES

### FLUORESCENT STARTER

Type	Description	Voltage (V)	Current (A)	Package	Type	Appl.
P01yyxA	Sensitive SCR	400	0.8	TO92	1	CTL
P02yyxA	Igt < 200 $\mu$ A	800	0.8	TO92	1	CTL
P01yyxN	Igt < 200 $\mu$ A	400	0.8	SOT223	1	CTL
P02yyxN	Igt < 200 $\mu$ A	800	0.8	SOT223	1	CTL
P01yyxL	Igt < 200 $\mu$ A	400	0.2	SOT23	1	CTL
TN22-1600D	Startlight	1000-1600	2	SOT82	2	FTS
TN22-1600K	Startlight	1000-1600	2	SOT194	2	FTS
PO130AL	Very sensitive SCR	400	0.2	SOT23	1	FTS
PO130AA	Igt = 1 $\mu$ A typ.	400	0.2	TO92	1	FTS
BZW06-xxx	Protection up to 600W	5.8-3.76		F126	3	HFP
DB3	Diac	32-36		DO35	4	HFP
TMMDB3	Diac	32-36		Minimelf	4	HFP

Applications:

CTL = Christmas Tree Lighting and equivalent application

FTS = Fluorescent Tube Starter and Driver

HFP = Protection for High Frequency Ballast

