

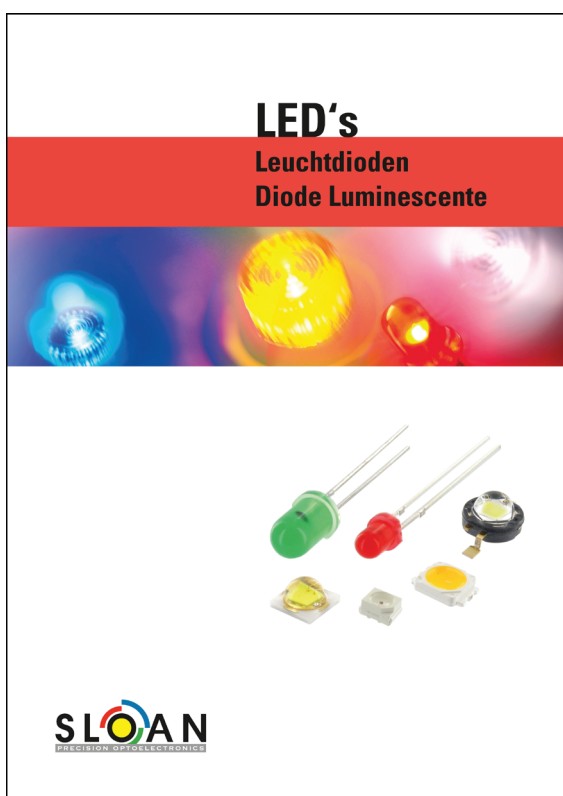
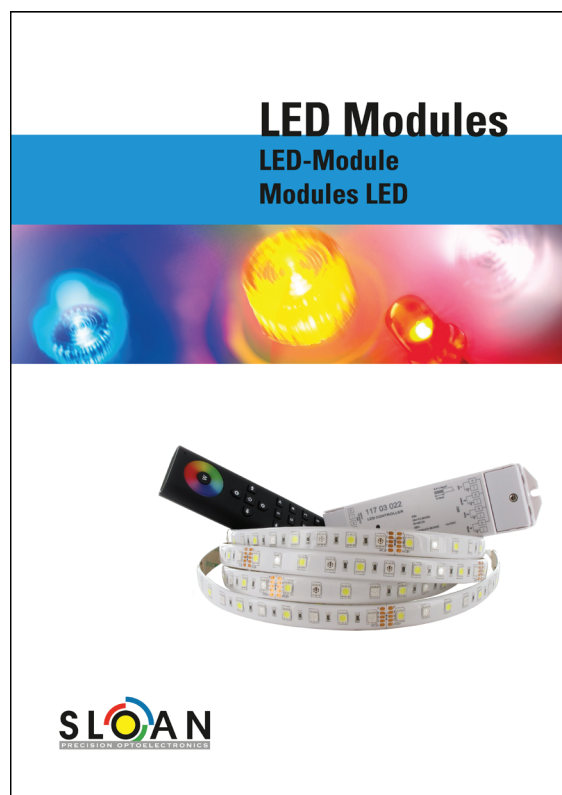
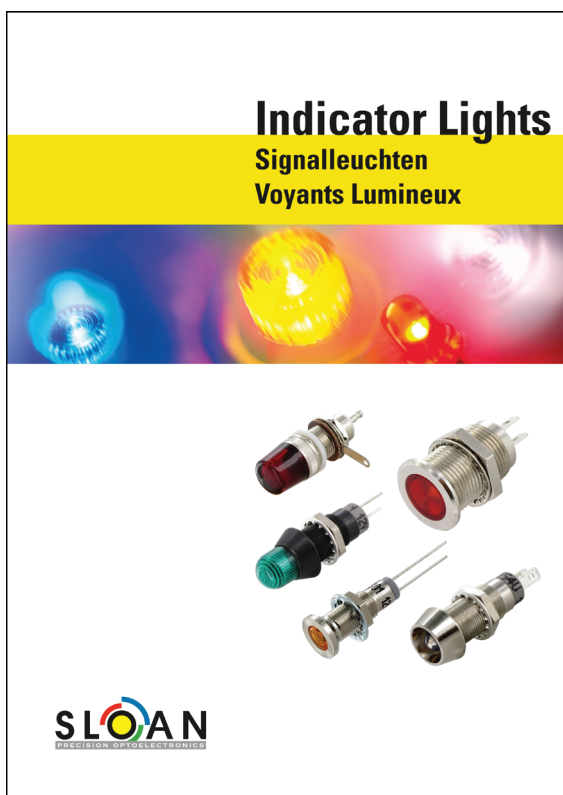
Based LED's

Gesockelte LEDs

LED à Culot



Additional Sloan Product Catalogues
Zusätzliche Sloan Produktkataloge
Catalogues additionnels des produits Sloan



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product catalogues**

**Fordern Sie Ihre gewünschten
Sloan-Produktkataloge an**

**Demandez votre catalogue selon
vos besoins**

Sloan based LED's

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MG	12V/24V	DC
MF	12V/24V	DC
WB4.6	5V/12V/24V	DC
T5.5	12V/24V	DC

Precautions for Electro Static Damage ESD

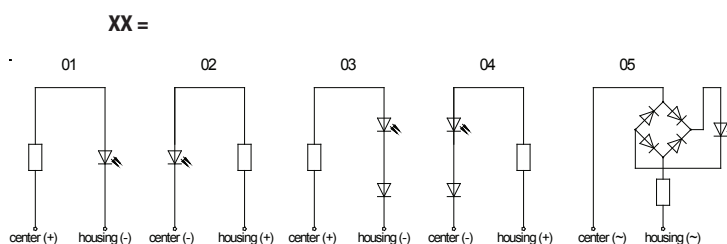
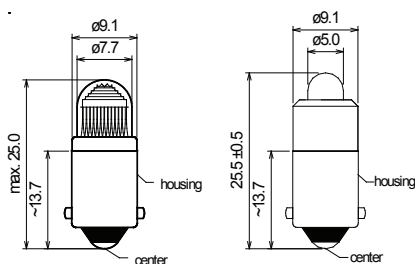
White based 5mm LEDs

- easy replacement of BA9S filament bulbs
- other colour and voltage on request
- RoHS compliant

BA9S



Part Number	Emitted colour	Electro-optical characteristics Ta = 25°C / 20mA				CIE	Epoxy
		Voltage U[V]	mcd min	mcd max	Directivity 2Θ½		
Without Cap							
BA9S-L5W50NBVWA XX	white	5V	1600	3200	65°	0.31/0.32	diffused
BA9S-L5W53NBVWA XX	white	5V	5200	10400	45°	0.31/0.32	clear
BA9S-L5W55NBVWA XX	white	5V	22600	44000	15°	0.31/0.32	clear
BA9S-L5W50NBVWB XX	white	12V	1600	3200	65°	0.31/0.32	diffused
BA9S-L5W53NBVWB XX	white	12V	5200	10400	45°	0.31/0.32	clear
BA9S-L5W55NBVWB XX	white	12V	22600	44000	15°	0.31/0.32	clear
BA9S-L5W50NBVWD XX	white	24V	1600	3200	65°	0.31/0.32	diffused
BA9S-L5W53NBVWD XX	white	24V	5200	10400	45°	0.31/0.32	clear
BA9S-L5W55NBVWD XX	white	24V	22600	44000	15°	0.31/0.32	clear
With Cap (for soft light-diffusion)							
BA9S-C1W50NBVWA XX	white	5V	1600	3200	65°	0.31/0.32	diffused
BA9S-C1W53NBVWA XX	white	5V	5200	10400	45°	0.31/0.32	clear
BA9S-C1W55NBVWA XX	white	5V	22600	44000	15°	0.31/0.32	clear
BA9S-C1W50NBVWB XX	white	12V	1600	3200	65°	0.31/0.32	diffused
BA9S-C1W53NBVWB XX	white	12V	5200	10400	45°	0.31/0.32	clear
BA9S-C1W55NBVWB XX	white	12V	22600	44000	15°	0.31/0.32	clear
BA9S-C1W50NBVWD XX	white	24V	1600	3200	65°	0.31/0.32	diffused
BA9S-C1W53NBVWD XX	white	24V	5200	10400	45°	0.31/0.32	clear
BA9S-C1W55NBVWD XX	white	24V	22600	44000	15°	0.31/0.32	clear



1. All dimensions are in millimetres
2. Tolerance is ±0.25mm unless otherwise specified
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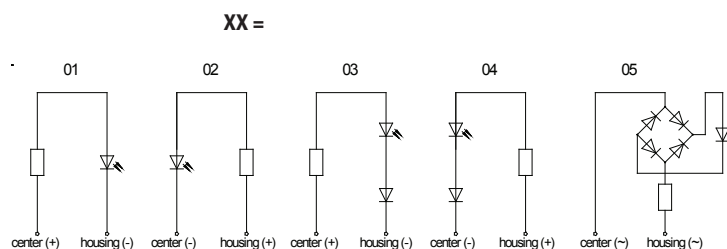
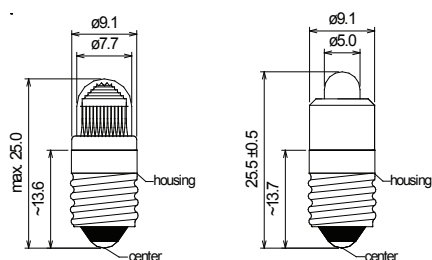
White based 5mm LEDs

E10

- easy replacement of E10 filament bulbs
- other colour and voltage on request
- RoHS compliant



Part Number	Emitted colour	Electro-optical characteristics Ta = 25°C / 20mA				CIE	Epoxy
		Voltage U[V]	mcd min	mcd max	Directivity 2Θ½		
Without Cap							
E10-L5W50NBVWA XX	white	5V	1600	3200	65°	0.31/0.32	diffused
E10-L5W53NBVWA XX	white	5V	5200	10400	45°	0.31/0.32	clear
E10-L5W55NBVWA XX	white	5V	22600	44000	15°	0.31/0.32	clear
E10-L5W50NBVWB XX	white	12V	1600	3200	65°	0.31/0.32	diffused
E10-L5W53NBVWB XX	white	12V	5200	10400	45°	0.31/0.32	clear
E10-L5W55NBVWB XX	white	12V	22600	44000	15°	0.31/0.32	clear
E10-L5W50NBVWD XX	white	24V	1600	3200	65°	0.31/0.32	diffused
E10-L5W53NBVWD XX	white	24V	5200	10400	45°	0.31/0.32	clear
E10-L5W55NBVWD XX	white	24V	22600	44000	15°	0.31/0.32	clear
With Cap (for soft light-diffusion)							
E10-C1W50NBVWA XX	white	5V	1600	3200	65°	0.31/0.32	diffused
E10-C1W53NBVWA XX	white	5V	5200	10400	45°	0.31/0.32	clear
E10-C1W55NBVWA XX	white	5V	22600	44000	15°	0.31/0.32	clear
E10-C1W50NBVWB XX	white	12V	1600	3200	65°	0.31/0.32	diffused
E10-C1W53NBVWB XX	white	12V	5200	10400	45°	0.31/0.32	clear
E10-C1W55NBVWB XX	white	12V	22600	44000	15°	0.31/0.32	clear
E10-C1W50NBVWD XX	white	24V	1600	3200	65°	0.31/0.32	diffused
E10-C1W53NBVWD XX	white	24V	5200	10400	45°	0.31/0.32	clear
E10-C1W55NBVWD XX	white	24V	22600	44000	15°	0.31/0.32	clear



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White based 3mm LEDs

- easy replacement of MG T1 $\frac{3}{4}$ filament bulbs
- other colour and voltage on request
- RoHS compliant

Midget Groove T1 $\frac{3}{4}$

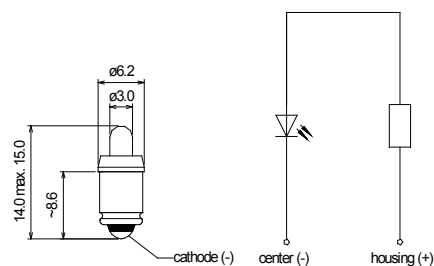
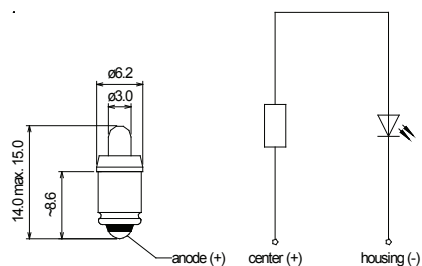


Part Number	Emitted colour	Electro-optical characteristics Ta = 25°C / 20mA					Epoxy
		Voltage U[V]	mcd min	mcd max	Directivity 2 $\theta_{\frac{1}{2}}$	CIE	
MG-W37NBVWB01	white	12V	9480	18960	20°	0.31/0.32	clear
MG-W36NBVWB01	white	12V	4610	9220	50°	0.31/0.32	clear
MG-W32NBVWB01	white	12V	2520	5040	60°	0.31/0.32	diffused
MG-W37NBVWM01	white	24V*	9480	18960	20°	0.31/0.32	clear
MG-W36NBVWM01	white	24V*	4610	9220	50°	0.31/0.32	clear
MG-W32NBVWM01	white	24V*	2520	5040	60°	0.31/0.32	diffused
MG-W37NBVWB02	white	12V	9480	18960	20°	0.31/0.32	clear
MG-W36NBVWB02	white	12V	4610	9220	50°	0.31/0.32	clear
MG-W32NBVWB02	white	12V	2520	5040	60°	0.31/0.32	diffused
MG-W37NBVWM02	white	24V*	9480	18960	20°	0.31/0.32	clear
MG-W36NBVWM02	white	24V*	4610	9220	50°	0.31/0.32	clear
MG-W32NBVWM02	white	24V*	2520	5040	60°	0.31/0.32	diffused

* I_F = 16mA

01 = ANODE (+) ON CENTERCONTACT DC (STANDARD)

02 = CATHODE (-) ON CENTERCONTACT DC



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White based 3mm LEDs

- easy replacement of MF T1 $\frac{3}{4}$ filament bulbs
- other colour and voltage on request
- RoHS compliant

Midget Flange T1 $\frac{3}{4}$

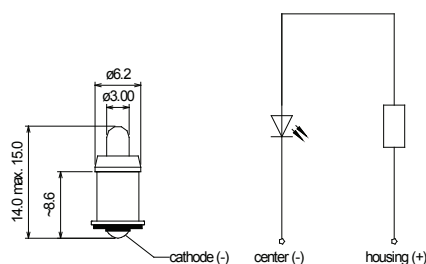
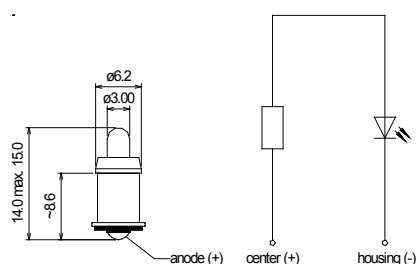


Part Number	Emitted colour	Electro-optical characteristics Ta = 25°C / 20mA					Epoxy
		Voltage U[V]	mcd min	mcd max	Directivity 2 $\Theta_{\frac{1}{2}}$	CIE	
MF-W37NBVWB01	white	12V	9480	18960	20°	0.31/0.32	clear
MF-W36NBVWB01	white	12V	4610	9220	50°	0.31/0.32	clear
MF-W32NBVWB01	white	12V	2520	5040	60°	0.31/0.32	diffused
MF-W37NBVWM01	white	24V*	9480	18960	20°	0.31/0.32	clear
MF-W36NBVWM01	white	24V*	4610	9220	50°	0.31/0.32	clear
MF-W32NBVWM01	white	24V*	2520	5040	60°	0.31/0.32	diffused
MF-W37NBVWB02	white	12V	9480	18960	20°	0.31/0.32	clear
MF-W36NBVWB02	white	12V	4610	9220	50°	0.31/0.32	clear
MF-W32NBVWB02	white	12V	2520	5040	60°	0.31/0.32	diffused
MF-W37NBVWM02	white	24V*	9480	18960	20°	0.31/0.32	clear
MF-W36NBVWM02	white	24V*	4610	9220	50°	0.31/0.32	clear
MF-W32NBVWM02	white	24V*	2520	5040	60°	0.31/0.32	diffused

* I_F = 16mA

01 = ANODE (+) ON CENTERCONTACT DC (STANDARD)

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White based 3mm LEDs

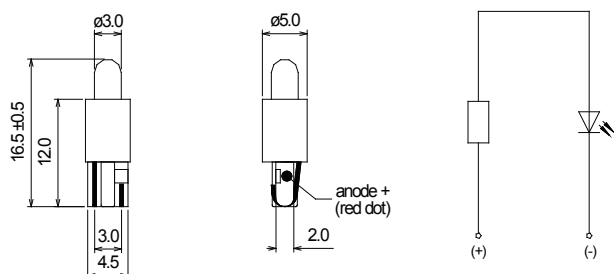
- easy replacement of Wedge Base W2.0 x 4.6d filament bulbs
- other colour and voltage on request
- RoHS compliant

Wedge Base W2.0 x 4.6d



Part Number	Emitted colour	Electro-optical characteristics Ta = 25°C / 20mA				CIE	Epoxy
		Voltage U[V]	mcd min	mcd max	Directivity 2Θ½		
WB4.6-W37NBVWA	white	5V	9480	18960	20°	0.31/0.32	clear
WB4.6-W36NBVWA	white	5V	4610	9220	50°	0.31/0.32	clear
WB4.6-W32NBVWA	white	5V	2520	5040	60°	0.31/0.32	diffused
WB4.6-W37NBVWB	white	12V	9480	18960	20°	0.31/0.32	clear
WB4.6-W36NBVWB	white	12V	4610	9220	50°	0.31/0.32	clear
WB4.6-W32NBVWB	white	12V	2520	5040	60°	0.31/0.32	diffused
WB4.6-W37NBVWM	white	24V*	9480	18960	20°	0.31/0.32	clear
WB4.6-W36NBVWM	white	24V*	4610	9220	50°	0.31/0.32	clear
WB4.6-W32NBVWM	white	24V*	2520	5040	60°	0.31/0.32	diffused

* I_F = 16mA



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White based 3mm LEDs

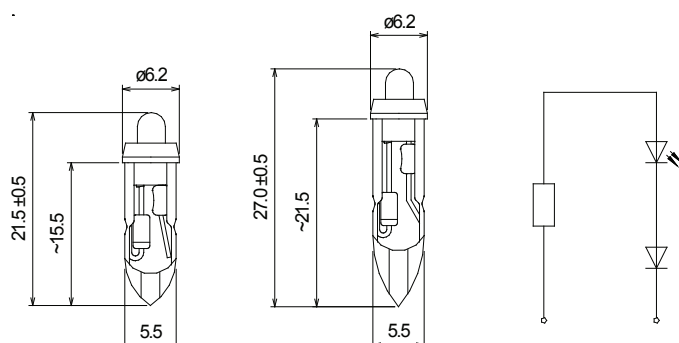
T5,5K / T5,5L

- easy replacement of T5,5K / T5,5L filament bulbs
- other colour and voltage on request
- RoHS compliant



Part Number	Emitted colour	Electro-optical characteristics Ta = 25°C / 20mA				CIE	Epoxy
		Voltage U[V]	mcd min	mcd max	Directivity 2Θ½		
Short Body 15.5mm							
T5,5K-W37NBVWB03	white	12V	9480	18960	20°	0.31/0.32	clear
T5,5K-W36NBVWB03	white	12V	4610	9220	50°	0.31/0.32	clear
T5,5K-W32NBVWB03	white	12V	2520	5040	60°	0.31/0.32	diffused
T5,5K-W37NBVWM03	white	24V*	9480	18960	20°	0.31/0.32	clear
T5,5K-W36NBVWM03	white	24V*	4610	9220	50°	0.31/0.32	clear
T5,5K-W32NBVWM03	white	24V*	2520	5040	60°	0.31/0.32	diffused
Long Body 21.5mm							
T5,5L-W37NBVWB03	white	12V	9480	18960	20°	0.31/0.32	clear
T5,5L-W36NBVWB03	white	12V	4610	9220	50°	0.31/0.32	clear
T5,5L-W32NBVWB03	white	12V	2520	5040	60°	0.31/0.32	diffused
T5,5L-W37NBVWB03	white	24V	9480	18960	20°	0.31/0.32	clear
T5,5L-W36NBVWB03	white	24V	4610	9220	50°	0.31/0.32	clear
T5,5L-W32NBVWB03	white	24V	2520	5040	60°	0.31/0.32	diffused

* If = 16mA



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Precautions for Electro Static Damage ESD

LED's and LED products are sensitive for static electricity. There are several precautions for proper ESD safe handling.

Handling:

Make sure working persons are trained in ESD safe handling of LED products and are always properly grounded when working with LED's and LED products.

We suggest to always use the following equipment when working with LED's and LED products

- a. Grounded conductive floor mats.
- b. Grounded conductive table mats (with the same potential as the floor).
- c. Conductive shoes or slippers to be worn by the persons handling the LED's.
- d. Grounded conductive wrists bands to be worn by the persons handling the LED's.
- e. Anti-electrostatic gloves to handle the LED's (these will also help to protect the LED's from contamination with dirt and other substances).
- f. Grounded working equipment, e.g. soldering irons, calibration equipment and other tools.
- g. Anti-electrostatic clothing to be worn by persons handling the LED's.
- h. Ionized air blower.
- i. Humidifier (especially in a dry working environment).

Delivery:

The LED's have to be transported in a conductive container.

Storage:

The LED's have to be stored in a conductive container located on a grounded surface.

Operation:

Prevent LED's and LED products from electrostatic discharge. Only use EMC approved power supplies with LED products and add additional EMC protective electronic components if your application or environment requires it.

Major application fields:

Automotive/Special vehicles:

Warning lights, emergency indicators, car immobilizing systems, car factory automation.

Blue LED flashers for Police cars, Diplomacy cars, special forces vehicles.

Consumer electronics:

Microwave ovens, toasters, coffee machines, Irons, refrigerators.

Industrial controls / Traffic controls:

Panel indicators, elevators, photo-processing darkroom lights, traffic control, railway track diagram indicators, power stations.

LED clusters for railway use.

Telecommunication:

PCB line indicators, status indicators, portable communication equipment.

Defence:

Tank/tank missiles, combat aircrafts, mine detectors warning lights, submarine engine control, fire coordination systems for tanks.

28 NATO Numbers.

NATO Manufacturer Code S3643.

French Army „GAM T1“ listed.

Aviation:

Commercial and military, cockpit lights, stewardess call systems.

Security:

Safety control panels surveillance, emergency lights.

Medical:

Fault indicators, sealed indicators for surgery equipment,

blood analyser, nurse-call systems, dentist equipment.

We strive to be a Total Quality company that anticipates and responds to our customer's needs, continuously improving our products and processes.

Sloan AG

Designs, manufactures and distributes electronic and electrooptical components which meet the highest standards for quality, durability and performance. In more than 30 years of service to the military and commercial markets SLOAN has developed the largest range of quality indicators and continues to introduce new, up-to-date products.

A development department, innovative and quickly responding, can realize designs of optoelectronic products according to customers specifications.

SLOAN offers an extensive range of waterproof devices for security equipments. Rugged metal housings, shock and vibrationproof, ultrabright LED indicators, sunlight visibility, viewing angle of more than 180° with LED's, are further advantages of the SLOAN range with which we satisfy our customers demands.

SLOAN's longstanding experience and innovations is a guarantee to provide customers with superior products, standard or custom designed, at reasonable cost.



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SLOAN AG was founded 1967 in Basel, Switzerland