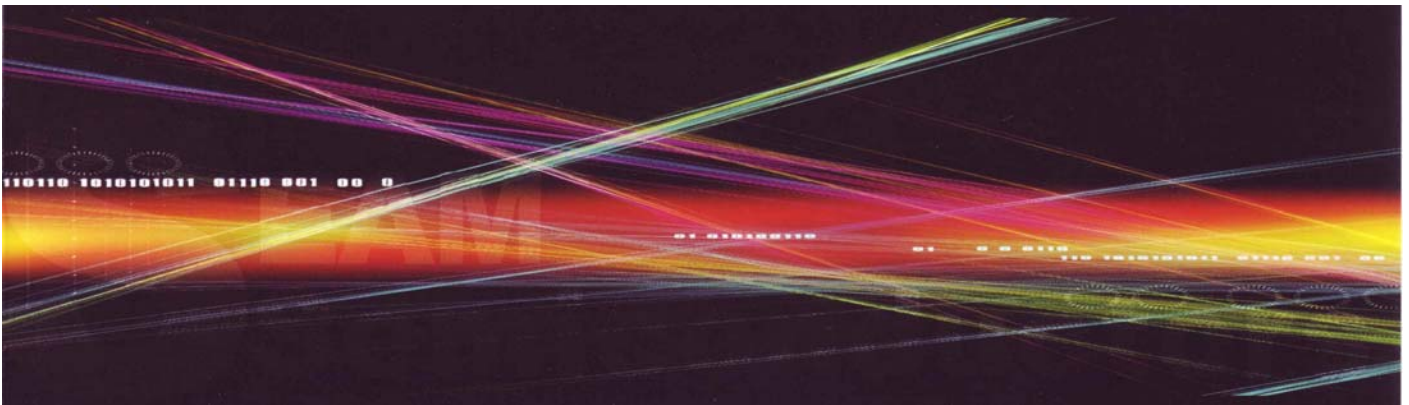


LED CHAIN CATALOGUE



SHORT FORM 2008

Using the latest generation of highly efficient LED emitters we offer standard modules designed for backlighting & signage applications. In addition our design team supports custom designs for specific applications.

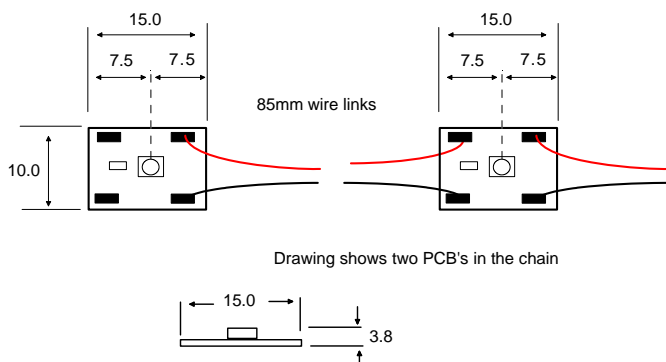
Features

- Wide range of sizes
- Choice of colours
- Circuit configurations
- Secondary Optics and heat sinks
- Optimised for colour consistency and intensity
- Easy to integrate

15mm LED CHAIN

PA1510-1SC41-85-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is ± 0.25 mm
10 chains /metre spaced at 80mm intervals
Conformal coating for moisture protection

• Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	RATINGS		UNIT
		Wh, Gr, Bl	R, Or, Yell	
Power Dissipation (per metre)	PD	2.2	2.2	W/m
Continuous Forward Current (per metre)	IF	0.18	0.18	A/m
DC Input Voltage	Vdc	12		V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings@ $T_a= 25^\circ\text{C}$)

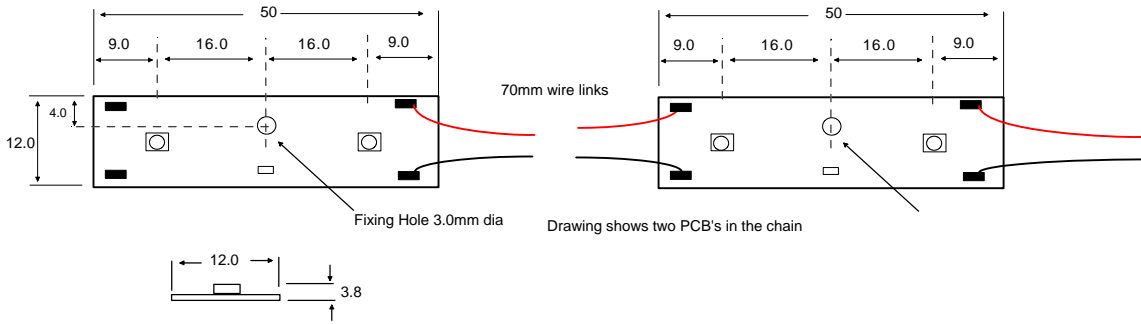
Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc	All Colours	If=20mA		12		V
Luminous Intensity (per board)	Iv	Red	If=20mA		1		cd
		Blue	If=20mA		0.2		
		Green	If=20mA		1		
		Yellow	If=20mA		1		
		White	If=20mA		1.4		
Wavelength	λ_{dnm}	Red	If=20mA		624		nm
		Blue	If=20mA		467		
		Green	If=20mA		528		
		Yellow	If=20mA		587		
			White	If=20mA	x= 0.31 y = 0.32		CC
Viewing Angle	2 θ 1/2(deg)	All colours	If=20mA		120		Degrees

Notes:
Reel qty 50 metres
Adhesive backing for ease of fixing
Please check with our office for the latest intensity yields
Specifications may be subject to change without notice

50mm LED CHAIN

PA5012-2SC41-70-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$
9 chains /metre spaced at 70mm intervals
On-board constant current driver
Conformal coating for moisture protection

• Absolute maximum ratings (Ta=25°C)

Parameter	SYMBOL	RATINGS		UNIT
		Wh, Gr, BI	R, Or, Yell	
Power Dissipation (per metre)	PD	2.2	2.2	W/m
Continuous Forward Current (per metre)	IF	0.18	0.18	A/m
DC Input Voltage	Vdc	12		V
Operating Temperature	Topr	-30 to +85		°C
Storage Temperature	Tstg	-40 to +100		°C

• Electro-optical characteristics (ratings@ Ta= 25°C)

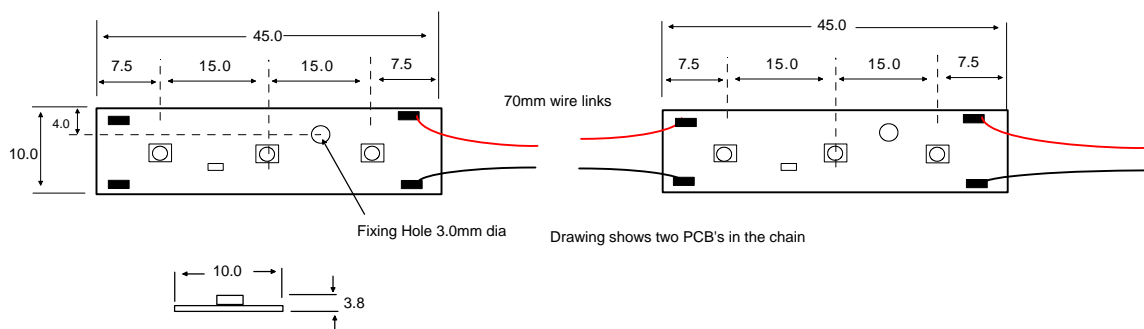
Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc	All Colours	If=20mA		12		V
Luminous Intensity (per board)	Iv	Red	If=20mA		2		cd
		Blue	If=20mA		0.4		
		Green	If=20mA		2		
		Yellow	If=20mA		2		
		White	If=20mA		2		
Wavelength	λ_{dnm}	Red	If=20mA		624		nm
		Blue	If=20mA		467		
		Green	If=20mA		528		
		Yellow	If=20mA		587		
			White	If=20mA	x= 0.31 y = 0.32		CC
Viewing Angle	2θ 1/2(deg)	All colours	If=20mA		120		Degrees

Notes:
Reel qty 50 metres
Adhesive backing for ease of fixing
Please check with our office for the latest intensity yields
Specifications may be subject to change without notice

45mm LED CHAIN

PA4510-3SC41-70-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$
9 chains /metre spaced at 70mm intervals
Conformal coating for moisture protection

• Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	RATINGS		UNIT
		Wh, Gr, BI	R, Or, Yell	
Power Dissipation (per metre)	PD	2.2	2.2	W/m
Continuous Forward Current (per metre)	IF	0.18	0.18	A/m
DC Input Voltage	Vdc	12		V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings@ $T_a= 25^\circ\text{C}$)

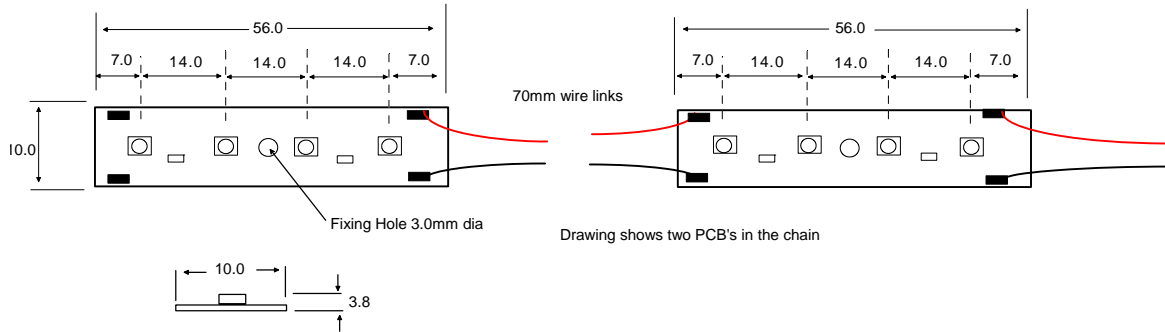
Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc	All Colours	If=20mA		12		V
Luminous Intensity (per board)	Iv	Red	If=20mA		3		cd
		Blue	If=20mA		0.6		
		Green	If=20mA		3		
		Yellow	If=20mA		3		
		White	If=20mA		3		
Wavelength	λ_{dnm}	Red	If=20mA		624		nm
		Blue	If=20mA		467		
		Green	If=20mA		528		
		Yellow	If=20mA		587		
			White	If=20mA	x= 0.31 y = 0.32		CC
Viewing Angle	2 θ 1/2(deg)	All colours	If=20mA		120		Degrees

Notes:
Reel qty 50 metres
Adhesive backing for ease of fixing
Please check with our office for the latest intensity yields
Specifications may be subject to change without notice

56mm LED CHAIN

PA5610-4SC41-70-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$
8 chains /metre spaced at 70mm intervals
Conformal coating for moisture protection

• Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	RATINGS		UNIT
		Wh, Gr, BI	R, Or, Yell	
Power Dissipation (per metre)	PD	2.2	2.2	W/m
Continuous Forward Current (per metre)	IF	0.18	0.18	A/m
DC Input Voltage	Vdc	12		V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings@ $T_a= 25^\circ\text{C}$)

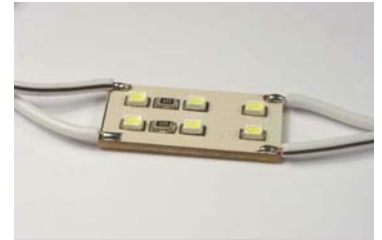
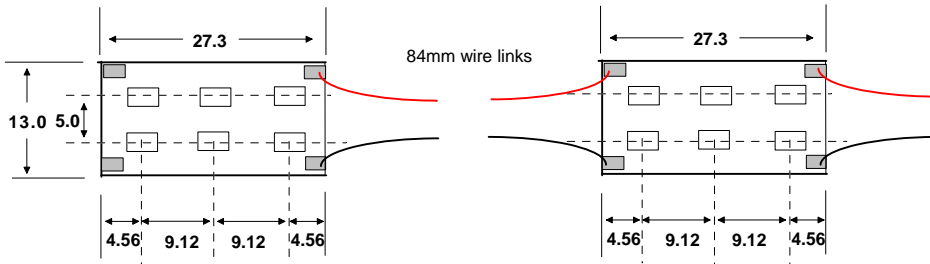
Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc	All Colours	$I_f=20\text{mA}$		12		V
Luminous Intensity (per board)	Iv	Red	$I_f=20\text{mA}$		4		cd
		Blue	$I_f=20\text{mA}$		0.8		
		Green	$I_f=20\text{mA}$		4		
		Yellow	$I_f=20\text{mA}$		4		
		White	$I_f=20\text{mA}$		4		
Wavelength	λ_{dnm}	Red	$I_f=20\text{mA}$		624		nm
		Blue	$I_f=20\text{mA}$		467		
		Green	$I_f=20\text{mA}$		528		
		Yellow	$I_f=20\text{mA}$		587		
			White	$I_f=20\text{mA}$		$x=0.31 y=0.32$	
Viewing Angle	2θ 1/2(deg)	All colours	$I_f=20\text{mA}$		120		Degrees

Notes:
Reel qty 50 metres
Adhesive backing for ease of fixing
Please check with our office for the latest intensity yields
Specifications may be subject to change without notice

27mm LED Chain

PA2713-6SL3020-84-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	BLUE/GREEN /WHITE	RED/ YELLOW	UNIT
Power Dissipation (per metre)	PD	4.32	4.32	W/m
Continuous forward Current (per metre)	IF	360	360	mA
DC Input Voltage	Vdc	12	12	V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings@ $T_a= 25^\circ\text{C}$)

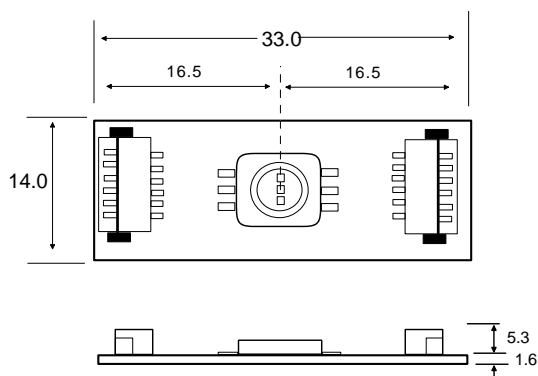
Parameter	Symbol	Prefix	Radiation Color	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc		All Colours	If= 20mA		12		V
Luminous Intensity per board	Iv	PB2713	Blue	If= 20mA				cd
		PT2713	Green	If= 20mA				
		PW2713	Cool White	If= 20mA		9		
		PX2713	Warm White	If= 20mA		6		
		PR2713	Red	If= 20mA				
		PY2713	Yellow	If= 20mA				
Wavelength	λ_{Dnm}	PB2713	Blue	If= 20mA		470		nm
		PT2713	Green	If= 20mA		525		
		PW2713	Cool White	If= 20mA	X=0.26, y=0.31			
		PX2713	Warm White	If= 20mA	X=0.38, y=0.44			
		PR2713	Red	If= 20mA		630		
		PY2713	Yellow	If= 20mA		590		
Viewing Angle	2θ 1/2(deg)		All Colours	If= 20mA		120		Degrees

Please contact our office for the latest bin intensity yields
Wire lead length & termination can be specified
Other sizes, colour/voltage options are available on request
Specifications may be subject to change without notice

33mm High Power RGB LED Chain

PA3314-LGXRGB

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$
Connect via standard 200mm wire links

• Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	RATINGS		UNIT
		Red	Green Blue	
Power Dissipation	PD	3.92		W/m
Continuous Forward Current	IF	0.35		A/m
Forward Voltage	Vdc	2.5	3.6	V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings @ $T_a= 25^\circ\text{C}$)

Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Luminous Intensity (per board)	Iv	Red	I _f =20mA		23.5		cd
		Blue	I _f =20mA		10.7		
		Green	I _f =20mA		45		
Wavelength	λ_{nm}	Red	I _f =20mA	619	624	629	nm
		Blue	I _f =20mA	465	467	470	
		Green	I _f =20mA	520	528	525	
Viewing Angle	2θ 1/2(deg)	All colours	I _f =20mA		120		Degrees

Notes:
Use in conjunction with secondary heatsinks
Requires constant current driver/controllers
Please check with our office for the latest intensity yields

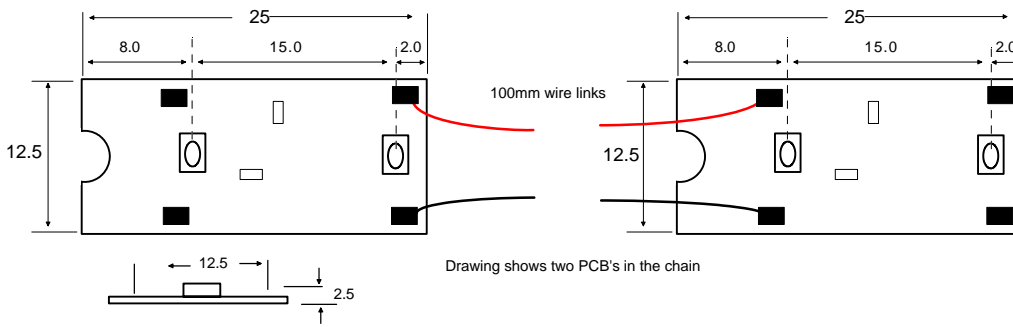
Specifications may be subject to change without notice

20/04/08

25mm LED CHAIN

PA2515-2NSSW-100-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$
Aluminium substrate PCB
On-board constant current driver
Conformal coating for moisture protection

• Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	RATINGS		UNIT
Power Dissipation (per module)	PD	0.6	0.6	W/m
Continuous Forward Current (per module)	IF	0.06	0.06	A/m
DC Input Voltage	Vdc	12		V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings@ $T_a= 25^\circ\text{C}$)

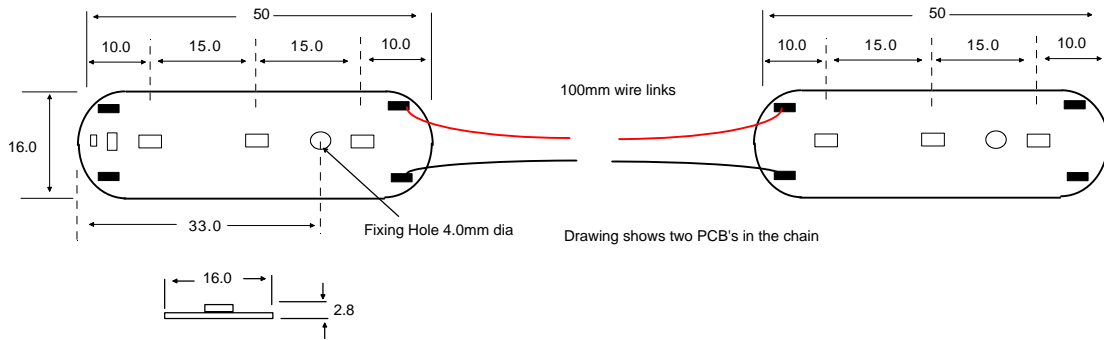
Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc	All Colours	If=20mA		12		V
Luminous Intensity (per board)	Iv	Red	If=20mA		2		cd
		Blue	If=20mA		0.4		
		Green	If=20mA		2		
		Yellow	If=20mA		2		
		White	If=20mA		2.4		
Wavelength	λ_{dnm}	Red	If=20mA		624		nm
		Blue	If=20mA		467		
		Green	If=20mA		528		
		Yellow	If=20mA		587		
			White	If=20mA	x= 0.31 y = 0.32		CC
Viewing Angle	2 θ 1/2(deg)	All colours	If=20mA		120		Degrees

Notes:
Reel qty 50 metres
Adhesive backing for ease of fixing
Please check with our office for the latest intensity yields
Specifications may be subject to change without notice

50mm LED CHAIN

PA50x16-3SW100-12vdc

Dimensions



Notes: All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$
10 chains /metre spaced at 100mm intervals
On-board constant current driver
Conformal coating for moisture protection

• Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	SYMBOL	RATINGS		UNIT
		Wh, Gr, Bl	R, Or, Yell	
Power Dissipation (per metre)	PD	3	3	W/m
Continuous Forward Current (per metre)	IF	0.25	0.25	A/m
DC Input Voltage	Vdc	12		V
Operating Temperature	Topr	-30 to +85		$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100		$^\circ\text{C}$

• Electro-optical characteristics (ratings@ $T_a= 25^\circ\text{C}$)

Parameter	Symbol	Radiation	Test Condition	Min	Typ	Max	Unit
Operating Voltage	Vdc	All Colours	$I_f=20\text{mA}$		12		V
Luminous Intensity (per board)	Iv	Red	$I_f=20\text{mA}$				cd
		Blue	$I_f=20\text{mA}$				
		Green	$I_f=20\text{mA}$				
		White	$I_f=20\text{mA}$		3		
Wavelength	λ_{dnm}	Red	$I_f=20\text{mA}$		624		nm
		Blue	$I_f=20\text{mA}$		467		
		Green	$I_f=20\text{mA}$		528		
		White	$I_f=20\text{mA}$	X= 0.31 y = 0.32			CC
Viewing Angle	$2\theta\ 1/2(\text{deg})$	All colours	$I_f=20\text{mA}$		120		Degrees

Notes:
Reel qty 50 metres
Adhesive backing for ease of fixing
Other voltage options are available on request
Please check with our office for the latest intensity yields
Specifications may be subject to change without notice