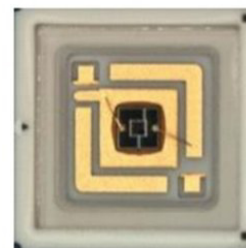


NIC PRODUCT PROFILE

NUVC66 series

UVC type, 278 nm Wavelength LED Diodes



www.niccomp.com/catalog/nuvc66.pdf

www.niccomp.com/series/NUVC66

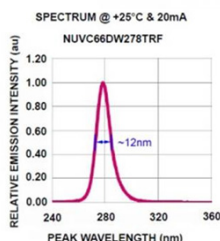
NIC Components is pleased to announce the addition of UVC type LEDs to its' expanded offering of UV LED products. The newly added NUVC66 series operates at 278nm, with a radiant flux of 1.3mW minimum at 20mA forward current and forward voltage of 5.7V. Ideal for use in water purification, sterilization and disinfection applications, phototherapy, florescent spectroscopy, sensor light for instrumentation applications, bio-analysis detection, counterfeit detection, as well as in curing applications, in conjunction with UVA (longer) wavelength LEDs for superior results, in surface curing, over single wavelength methods. Supplied in surface mount 6.0mm x 6.0mm package, with 1.4mm height, NUVC66 is ideal for use in low profile applications. With thermal resistance of 37°C/W, the NUVC66 ceramic body package includes thermal pad on underside of the device, for heat dissipation and improved thermal management. LED construction provides long lifetime performance over operating temperature range of -40°C to +60°C, with a thermal junction maximum of +65°C. Supplied tape and reeled on embossed carrier tape for automated pick and placement, followed by reflow soldering, NUVC66 is RoHS compliant and halogen free. NUVC66 unit pricing from \$28.15 each, in production volumes. Please contact NIC for samples and to review your requirements.

FEATURES

- Long lifetime LED construction
- Precise 278nm wavelength energy
- Small SMD case size
- Wide operating range of -40°C to +60°C
- Supports wide range of applications

ADVANTAGES:

- ➔ Replace short lifetime & energy wasteful UV lamps
- ➔ Eliminate hazardous disposal common to UV lamps
- ➔ Instant ON for pulsed applications



Evaluation module
NIC PN: **NUVC66DW278 - Demo Module**

Co-sell with NIC Products:



NPIM_P – SMT Power Inductors
Metal Composite Shielded;
High Current - Low Loss



NCLS – Low cost Metal Foil on
Ceramic Current Sensing Resistors

Circuit Applications:

- Water purification
- Sterilization
- Disinfection
- Phototherapy
- Florescent spectroscopy
- Sensor light
- Bio-analysis detection
- Counterfeit detection
- Curing applications

End Products

- Water processing
- Food processing
- Disinfecting Equipment
- Test & Instrumentation
- Curing systems (inks, coatings)

➔ Cross the below competitor PNs

Competitor	Product Series
AKM / Crystal IS	OPTAN-WSK-SMD
Dowa	xFxV_
Nichia	Contact for evaluation samples
Nikkiso	Micro SMD
(SETi)	UVTOP
Seoul Viosys	CUD8AF1A
Tianhui	TH--UV275_



NIC Components Corp.



Cross & Replacement Support ... tpmg@niccomp.com

NIC PRODUCT DESIGN PROFILE

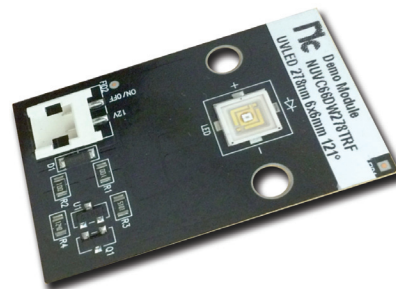
NUVC66DW278TRF Demo Module

UV LED, 278nm, 1.8mW, 5.7VDC

Application: UVC Sterilization

Available Today:

NIC PN: NUVC66DW278 - Demo Module



Design with NIC

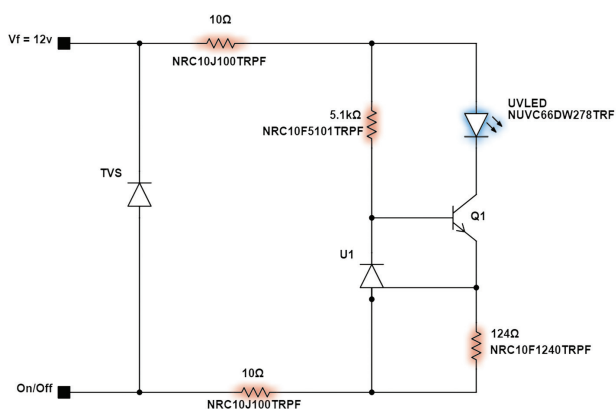
Design, Share & Sample With NIC's **Interactive Circuit Design Tool**

- ◆ Build and share your designs for collaboration
- ◆ Export full Bill of Materials to PDF and CAD files
- ◆ Select Samples with **NIC QuickKIT**
- ◆ Search NIC Partnumbers with **QuickBUILDER**

Available Today:

Select 'NUVC66DW278TRF Demo Board' to modify and build your own design

Visit www.NICcomp.com for more details



NIC Bill of Materials -

Ref	Component Description	NIC Part Number	Qty
UV LED	278nm, 1.8mW, 5.7VDC	NUVC66DW278TRF	1
R4 (124Ω)	Thick film chip resistor ±1 % tolerance, 0805 size	NRC10F1240TRPF	1
R3 (5.1kΩ)	Thick film chip resistor ±1 % tolerance, 0805 size	NRC10F5101TRPF	1
R1, R2 (10Ω)	Thick film chip resistor ± 5%, 0805 size	NRC10J100TRPF	2
PCB	Metal PCB; 1.64mm thickness 38mm x 25mm	N/A	1

Precautions - Notice:

1. UV-LEDs emit invisible ultra-violet radiation when in operation, which may be harmful to eyes or skin, even for brief periods. Protect from exposure to UV energy when powered on.
2. Thermal management and thermal design is important to consider from earliest design stage, as performance of the UVC LED package will be affected by the thermal resistance of the circuit board, the density of the LED placement with surrounding components and effectiveness of the heat dissipation (heat sink, cooling) connection to the thermal pad on underside of the component .
3. Use metal PCB with high thermal conductivity, so temperature of LED package is controlled to not exceed the maximum junction temperature (T_J) of +65°C



Contact NIC Technical Support ... tpmg@niccomp.com