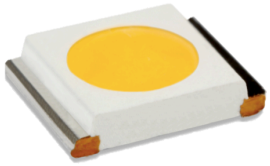
SEOUL

# Acrich MJT


**Flux Binning (lumens)**

| bin | min | max |
|---|---|---|
| L30 | 99 | 107.3 |
| L32 | 107.3 | 115.5 |
| L35 | 115.5 | 123.8 |
| L37 | 123.8 | 132 |
| M40 | 132 | 140.3 |
| R5 | 26.4 | 27.9 |
| S0 | 27.9 | 29.5 |
| S5 | 29.5 | 31 |
| S6 | 29.8 | 33.8 |
| T0 | 31 | 32.6 |
| T9 | 33.8 | 37.8 |
| V2 | 37.8 | 41.9 |
| W5 | 41.9 | 45.9 |
| X8 | 45.9 | 49.9 |
| Y1 | 49.9 | 53.9 |
| Z4 | 53.9 | 58.9 |

**SAWx4A0A**

| | | |
|---|---|---|
| S1 | 54 | 60 |
| S2 | 60 | 70 |
| T1 | 70 | 80 |
| T2 | 80 | 91 |

**Vf Binning (V)**

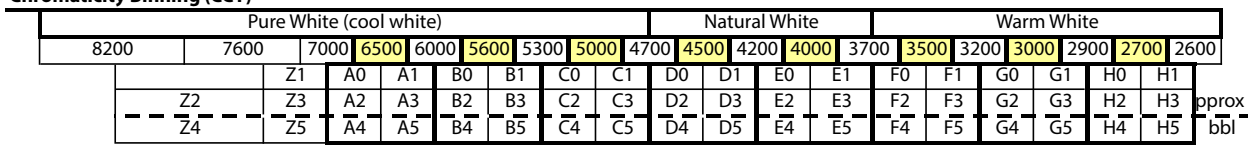
| bin | min | max |
|---|---|---|
| **SAW8P42A** | | |
| A | 11.8 | 12.4 |
| B | 12.4 | 13 |
| C | 13 | 13.6 |
| D | 13.6 | 14.2 |
| **SAW8KG0A** | | |
| A | 17.9 | 18.5 |
| B | 18.5 | 19.1 |
| C | 19.1 | 19.7 |
| **SAW8KG0B** | | |
| A | 20.7 | 21.5 |
| B | 21.5 | 22.2 |
| C | 22.2 | 23 |
| **SAW8WA2A** | | |
| C | 30 | 32.5 |
| D | 32.5 | 34.5 |

**Specifications**

| Vf (V) | part number | pkg | Typ. Flux cool | Typ. Flux warm | If rated (mA) | Power (W) | cool L/W | Rθ (K/W) | deg | CCT range | Tj | CRI min |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | **SAW8P42A** | 6540 | 30.1 | n/a | 20 | 0.26 | 116 | 20 | 115 | 3700 - 7000 | 125 | 80 |
| 19 | **SAW8KG0A** | 5630 | 35.9 | 35.3 | 20 | 0.38 | 94 | 27 | 115 | 2600 - 7000 | 125 | 80 |
| 22 | **SAW8KG0B** | 5630 | 42.8 | 37.8 | 20 | 0.44 | 97 | 27 | 115 | 2600 - 7000 | 125 | 80 |
| 32.5 | **SAW8WA2A** | 3528 | 120 | 110 | 40 | 1.3 | 92 | 23 | 120 | 2600 - 7000 | 125 | 80 |
| 55 | **SAWx4A0A** | 7070 | 70 | 65 | 20 | 1.1 | 64 | 10 | 120 | 27-35, 50-65 | | 70/80 typ |

MAH3042-120V-2 step 4W
MAH3040- 220V-2 step 4W
DT3001A - 4 step 4W, 8W
DT3001B - 4 step, 12W, 16W

**Chromaticity Binning (CCT)**

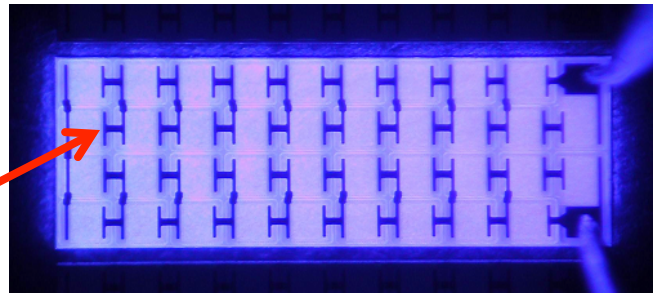



SEOUL

SEOUL SEMICONDUCTOR

# AcrichMJT Technology

High Voltage (HV) LEDs have multiple junctions or cells in the same chip or chip-on-board (COB) module




HV LED Chip


- Overall voltage is a combination of the individual cells
  - Different forward voltages can be created by changing the number of cells per die or module
  - Single area source (no optical issues)

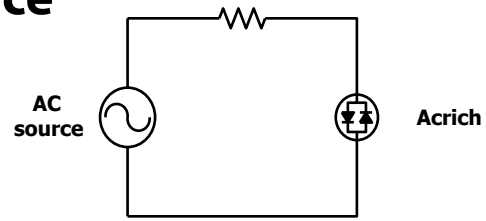
# Multi-Junction Technology
## *High-Voltage LEDs*

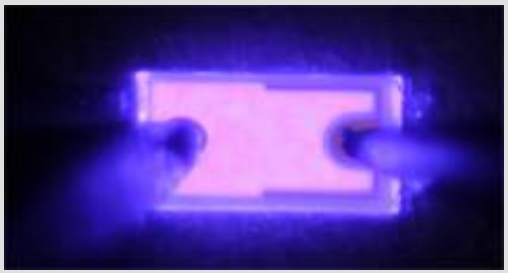
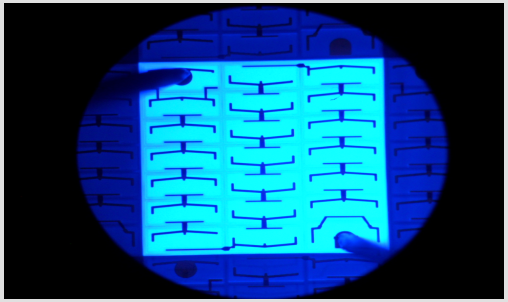
Acrich MJT

*"Acro" = Top or First*

*"Rich" = Value*

- **First AC LED in volume production**
- **May be driven with AC or DC Power**
- **Leveraging 10 years of AC LED experience**




| | |
|---|---|
| DC LED |  |
| Acrich LED |  |

*Monolithic Arrays of LED Cells Create a High Voltage LED*