



# CONVECTIVE SYSTEMS NOZZLES

THESE NOZZLES ARE FOR USE WITH THE ST 300, ST 325 & ST 350

| BGA NOZZLES                                                                       | COMPONENT                           | BGA SIZE (NOMINAL)                | PART NUMBER |
|-----------------------------------------------------------------------------------|-------------------------------------|-----------------------------------|-------------|
|  | BGA-204/225/256/<br>272/292/320/324 | 27mm x 27mm (1.1" x 1.1")         | 4028-5001   |
|                                                                                   | BGA-169/168                         | 23mm x 23mm (0.91" x 0.91")       | 4028-5002   |
|                                                                                   | BGA-313/352                         | 35mm x 35mm (1.38" x 1.38")       | 4028-5003   |
|                                                                                   | BGA-144                             | 13mm x 13mm (0.51" x 0.51")       | 4028-5004   |
|                                                                                   | BGA-121/196                         | 15mm x 15mm (0.59" x 0.59")       | 4028-5005   |
|                                                                                   | BGA-86                              | 16.25mm x 17.75mm (0.64" x 0.70") | 4028-5006   |
|                                                                                   | BGA-68                              | 13.45mm x 14.97mm (0.53" x 0.59") | 4028-5007   |
|                                                                                   | BGA-32                              | 10.42mm x 10.42mm (0.41" x 0.41") | 4028-5008   |
|                                                                                   | BGA-40/44                           | 11.97mm x 13.21mm (0.47" x 0.52") | 4028-5009   |
|                                                                                   | BGA-18                              | 8.64mm x 8.90mm (0.34" x 0.35")   | 4028-5010   |
|                                                                                   | BGA-421/432/736                     | 40mm x 40mm (1.57" x 1.57")       | 4028-5012   |
|                                                                                   | BGA-560                             | 42.5mm x 42.5mm (1.67" x 1.67")   | 4028-5013   |
|                                                                                   | BGA-240/304/432                     | 31mm x 31mm (1.22" x 1.22")       | 4028-5014   |
|                                                                                   | BGA-256                             | 17mm x 17mm (0.67" x 0.67")       | 4028-5015   |
|                                                                                   | BGA-252/255/256                     | 21mm x 21mm (0.83" x 0.83")       | 4028-5016   |
|                                                                                   | BGA (Short Adpt.)                   | 21mm x 21mm (0.83" x 0.83")       | 4028-5017   |
|                                                                                   | BGA-479/493/584                     | 37.5mm x 37.5mm (1.48" x 1.48")   | 4028-5018   |
|                                                                                   | BGA-96/121                          | 19mm x 19mm (0.75" x 0.75")       | 4028-5019   |
|                                                                                   | BGA-240/324                         | 32mm x 32mm (1.26" x 1.26")       | 4028-5020   |
|                                                                                   | BGA-256/400                         | 29mm x 29mm (1.14" x 1.14")       | 4028-5021   |
|                                                                                   | BGA-100                             | 16mm x 16mm (0.63" x 0.63")       | 4028-5022   |
|                                                                                   | BGA-119                             | 22mm x 14mm (0.87" x 0.55")       | 4028-5023   |
|                                                                                   | BGA-169                             | 19.25mm x 19.25mm (0.76" x 0.76") | 4028-5024   |
|                                                                                   | BGA-196                             | 18.5mm x 18.5mm (0.73" x 0.73")   | 4028-5025   |
|                                                                                   | BGA-240                             | 26.4mm x 26.4mm (1.04" x 1.04")   | 4028-5026   |
|                                                                                   | BGA-256                             | 30mm x 30mm (1.18" x 1.18")       | 4028-5027   |
|                                                                                   | BGA-475                             | 25mm x 32.3mm (0.98" x 1.27")     | 4028-5028   |
|                                                                                   | BGA-521                             | 43mm x 43mm (1.69" x 1.69")       | 4028-5029   |
|                                                                                   | BGA-540                             | 44mm x 44mm (1.73" x 1.73")       | 4028-5030   |
|                                                                                   | BGA-625                             | 32.5mm x 32.5mm (1.28" x 1.28")   | 4028-5031   |
|                                                                                   | BGA-169                             | 22mm x 22mm (0.87" x .87")        | 4028-5032   |
|                                                                                   | BGA-361                             | 33mm x 33mm (1.29" x 1.29")       | 4028-5033   |
|                                                                                   | BGA-720                             | 47.5mm x 47.5mm (1.87" x 1.87")   | 4028-5034   |
|                                                                                   | BGA-303                             | 21mm x 25mm (0.83" x 0.98")       | 4028-5035   |
|                                                                                   | BGA (Short Adpt.)                   | 17mm x 17mm (0.67" x 0.67")       | 4028-5036   |
|                                                                                   | BGA (Small Cup)                     | 21mm x 21mm (0.83" x 0.83")       | 4028-5037   |
|                                                                                   | Micro BGA-48                        | 7.75mm x 5.6mm (0.31" x 0.22")    | 4028-5501   |
|                                                                                   | Micro BGA-48                        | 7.85mm x 6.40mm (0.31" x 0.25")   | 4028-5502   |

# CONVECTIVE SYSTEMS NOZZLES

CANNOT FIND THE RIGHT NOZZLE FOR YOUR APPLICATION? GIVE US A CALL, WE MAKE CUSTOM NOZZLES!

| PATTERN NOZZLES                                                                                                                                                                                                                                             | COMPONENT TYPE             | JET SPACING                       | JET LENGTH      | PART NUMBER |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------|-----------------|-------------|
|                                                                                                                                                                            | SOIC- 8 (JEDEC)            | 4.1mm (0.16")                     | 6.1mm (0.24")   | 4028-4001   |
|                                                                                                                                                                                                                                                             | SOIC-14/16 (JEDEC)         | 4.1mm (0.16")                     | 10.9mm (0.43")  | 4028-4002   |
|                                                                                                                                                                                                                                                             | SOICL-16 (JEDEC)           | 7.9mm (0.31")                     | 10.9mm (0.43")  | 4028-4003   |
|                                                                                                                                                                                                                                                             | SOICL-20 (JEDEC)           | 7.9mm (0.31")                     | 13.5mm (0.53")  | 4028-4004   |
|                                                                                                                                                                                                                                                             | SOICL-24 (JEDEC)           | 7.9mm (0.31")                     | 16mm (0.63")    | 4028-4005   |
|                                                                                                                                                                                                                                                             | SOICL-28 (JEDEC)           | 7.9mm (0.31")                     | 18.5mm (0.73")  | 4028-4006   |
|                                                                                                                                                                                                                                                             | SOICL-32 (JEDEC)           | 11.68mm (0.46")                   | 20.83mm (0.82") | 4028-4007   |
|                                                                                                                                                                                                                                                             | TSOP-48 (Type I)           | 18.6mm (0.734")                   | 18.6mm (0.734") | 4028-4505   |
|                                                                                                                                                                                                                                                             | TSOP-32/40/44/50 (Type II) | 10.4mm (0.41")                    | 21.35mm (0.84") | 4028-4506   |
| SINGLE JET NOZZLES                                                                                                                                                                                                                                          | SHAPE OF JET TUBE          | NOZZLE SIZE (NOMINAL)             |                 | PART NUMBER |
|                                                                                                                                                                            | Curved, Round              | 3.0mm diameter (0.1" diameter)    |                 | 4028-1001   |
|                                                                                                                                                                                                                                                             | Curved, Round              | 5.0mm diameter (0.2" diameter)    |                 | 4028-1002   |
|                                                                                                                                                                                                                                                             | Curved, Round              | 8.0mm diameter (0.3" diameter)    |                 | 4028-1003   |
|                                                                                                                                                                                                                                                             | Straight, Round            | 3.0mm diameter (0.01" diameter)   |                 | 4028-1011   |
|                                                                                                                                                                                                                                                             | Straight, Round            | 5.0mm diameter (0.2" diameter)    |                 | 4028-1012   |
|                                                                                                                                                                                                                                                             | Straight, Round            | 8.0mm diameter (0.3" diameter)    |                 | 4028-1013   |
|                                                                                                                                                                                                                                                             | Flat Jet                   | 13.21mm length (0.52")            |                 | 4028-1021   |
|                                                                                                                                                                                                                                                             | Flat Jet                   | 23.37mm length (0.92")            |                 | 4028-1022   |
| BOX NOZZLES                                                                                                                                                                                                                                                 | COMPONENT TYPE             | NOZZLE SIZE (NOMINAL)             |                 | PART NUMBER |
|    | PLCC                       | 32.5mm x 46.5mm (" x ")           |                 | 4028-1501   |
|                                                                                                                                                                                                                                                             | PLCC-18 (Non Baffled)      | 8.5mm x 12.1mm (0.34" x 0.48")    |                 | 4028-2001   |
|                                                                                                                                                                                                                                                             | PLCC-20 (Non Baffled)      | 10.2mm x 10.2mm (0.40" x 0.40")   |                 | 4028-2002   |
|                                                                                                                                                                                                                                                             | PLCC-28 (Non Baffled)      | 12.8mm x 12.8mm (0.50" x 0.50")   |                 | 4028-2003   |
|                                                                                                                                                                                                                                                             | PLCC-32 (Non Baffled)      | 12.8mm x 15.3mm (0.50" x 0.60")   |                 | 4028-2004   |
|                                                                                                                                                                                                                                                             | PLCC-44 (Non Baffled)      | 17.9mm x 17.9mm (0.70" x 0.70")   |                 | 4028-2005   |
|                                                                                                                                                                                                                                                             | PLCC-52                    | 20.4mm x 20.4mm (0.80" x 0.80")   |                 | 4028-2006   |
|                                                                                                                                                                                                                                                             | PLCC-68                    | 25.5mm x 25.5mm (1.01" x 1.01")   |                 | 4028-2007   |
|                                                                                                                                                                                                                                                             | PLCC-84                    | 30.6mm x 30.6mm (1.20" x 1.20")   |                 | 4028-2008   |
|                                                                                                                                                                                                                                                             | PLCC-100                   | 38.9mm x 38.9mm (1.53" x 1.53")   |                 | 4028-2009   |
|                                                                                                                                                                                                                                                             | QFP-80/100                 | 18.1mm x 24.1mm (0.71" x 0.95")   |                 | 4028-2501   |
|                                                                                                                                                                                                                                                             | QFP-64/80 (Non Baffled)    | 17.0mm x 17.0mm (0.67" x 0.67")   |                 | 4028-2502   |
|                                                                                                                                                                                                                                                             | QFP-132                    | 26.9mm x 26.9mm (1.06" x 1.06")   |                 | 4028-2503   |
|                                                                                                                                                                                                                                                             | QFP-160                    | 31.9mm x 31.9mm (1.26" x 1.26")   |                 | 4028-2504   |
|                                                                                                                                                                                                                                                             | QFP-208                    | 31.5mm x 31.5mm (1.24" x 1.24")   |                 | 4028-2505   |
|                                                                                                                                                                                                                                                             | QFP-240                    | 34.6mm x 34.6mm (1.36" x 1.36")   |                 | 4028-2506   |
|                                                                                                                                                                                                                                                             | BQFP-100                   | 23.5mm x 23.5mm (" x ")           |                 | 4028-2507   |
|                                                                                                                                                                                                                                                             | BQFP-84                    | 20.9mm x 20.9mm (" x ")           |                 | 4028-2508   |
|                                                                                                                                                                                                                                                             | BQFP-132                   | 27.1mm x 27.1mm (1.07" x 1.07")   |                 | 4028-2602   |
|                                                                                                                                                                                                                                                             | TQFP-32 (Non Baffled)      | 11.5mm x 11.5mm (0.453" x 0.453") |                 | 4028-3002   |
|                                                                                                                                                                                                                                                             | TQFP-120 (Non Baffled)     | 15.5mm x 15.5mm (0.610" x 0.610") |                 | 4028-3004   |
|                                                                                                                                                                                                                                                             | TQFP-48                    | 18.6mm x 18.6mm (0.734" x 0.734") |                 | 4028-4505   |