

Pattern Number as $f(z)$

In “Pattern Number as $f(z)$ ” mode, you must create a Z wave that contains the actual pattern numbers for each data point. See **Fill Patterns** on page III-498 for a list of pattern numbers.

Color as $f(z)$ Legend Example

If you have a graph that uses the color as $f(z)$ mode, you may want to create a legend that identifies what the colors correspond to. This section demonstrates using the features of the Legend operation for this purpose.

Execute these commands, one-at-a-time:

```
// Make test data
Make /O testData = {1, 2, 3}

// Display in a graph in markers mode
Display testData
ModifyGraph mode=3,marker=8,msize=5

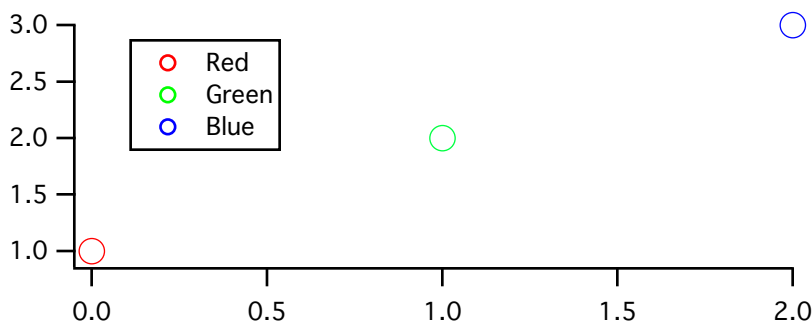
// Create a normal legend where the symbol comes from the trace
Legend/C/N=legend0/J/A=LT "\\s(testData) First\r\\s(testData)
Second\r\\s(testData) Third"

// Make a color index wave to control the marker color
Make /O testColorIndex = {0, 127, 225}

// Change the graph trace to use color as  $f(z)$  mode.
// Rainbow256 is the name of a built-in color table.
// The numbers 0 and 255 set the color index values that correspond to the
// first and last entries in the color table.
ModifyGraph zColor(testData)={testColorIndex,0,255,Rainbow256,0}

// Change the legend so that it shows the colors
Legend/C/N=legend0/J/A=LT "\\k(65535,0,0)\\W608 Red\r\\k(0,65535,0)\\W608
Green\r\\k(0,0,65535)\\W608 Blue"
```

The result is this graph:



The last command used the `\W` escape sequence to specify which marker to use in the legend (08 for the circle marker in this case) and the marker thickness (6 means 1.0 points).

The `\k` escape sequence specifies the color to use for stroking the marker specified by `\W`. You would use `\K` to specify the marker fill color. Colors are specified in RGB format where each component falls in the range 0 to 65535.