## FEATURES:

- Current up to 6.8A
- Larg Current
- Flat-top for Pick \& Place
- Low cost



## OPTIONS:

- Tape \& Reel is Standard Bulk Packaging Available for Smaller Quantities
- Tolerance:10\% and 20\% is Standard
- Custom Design Available


## COMMON APPLICATIONS:

- Ideal for Palm-Top and Laptop

DC-DC Converters

- PDA's Flash Memory
- Step-up,Step-down Converters
- Top-box


## STANDARD SPECIFICATION:

| Part | Inductance | DCR( $\Omega$ ) |  |  |  |  |  |  |  |  | IDC(A) Max |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\mu \mathrm{H}$ | SDR0302 | SDR0403 | SDR0503 | SDR0504 | SDR0703 | SDR0705 | SDR1004 | SDR1005 | SDR1008 | SDR0302 | SDR0403 | SDR0503 | SDR0504 | SDR0703 | SDR0705 | SDR1004 | SDR1005 | SDR1008 |
| 1R0 | 1.0 | 0.07 | 0.049 | 0.03 | 0.028 |  |  |  |  |  | 2.080 | 2.560 | 4.500 | 3.000 |  |  |  |  |  |
| 1R4 | 1.4 | 0.09 | 0.057 | 0.04 | 0.029 |  |  |  |  |  | 1.860 | 2.520 | 4.000 | 2.800 |  |  |  |  |  |
| 1R8 | 1.8 | 0.11 | 0.064 | 0.05 | 0.030 |  |  |  |  |  | 1.800 | 1.950 | 3.300 | 2.600 |  |  |  |  |  |
| 2R2 | 2.2 | 0.13 | 0.072 | 0.06 | 0.042 |  |  |  |  |  | 1.390 | 1.750 | 2.940 | 2.300 |  |  |  |  |  |
| 2R7 | 2.7 | 0.14 | 0.079 | 0.07 | 0.044 |  |  |  |  |  | 1.320 | 1.580 | 2.500 | 2.100 |  |  |  |  |  |
| 3R3 | 3.3 | 0.20 | 0.087 | 0.08 | 0.045 |  |  |  |  |  | 1.250 | 1.440 | 2.350 | 2.000 |  |  |  |  |  |
| 3R9 | 3.9 | 0.21 | 0.094 | 0.09 | 0.047 |  |  |  |  |  | 1.200 | 1.330 | 2.200 | 1.950 |  |  |  |  |  |
| 4R7 | 4.7 | 0.33 | 0.109 | 0.14 | 0.048 |  |  |  |  |  | 1.030 | 1.150 | 2.000 | 1.900 |  |  |  |  |  |
| 5R6 | 5.6 | 0.35 | 0.126 | 0.15 | 0.050 |  |  |  |  |  | 0.910 | 1.100 | 1.800 | 1.800 |  |  |  |  |  |
| 6R8 | 6.8 | 0.38 | 0.132 | 0.16 | 0.060 |  |  |  |  |  | 0.850 | 1.080 | 1.700 | 1.600 |  |  |  |  |  |
| 8R2 | 8.2 | 0.43 | 0.147 | 0.17 | 0.090 |  |  |  |  |  | 0.820 | 1.050 | 1.400 | 1.500 |  |  |  |  |  |
| 100 | 10 | 0.50 | 0.182 | 0.18 | 0.10 | 0.08 | 0.07 | 0.05 | 0.06 | 0.036 | 0.740 | 1.040 | 1.200 | 1.440 | 1.440 | 2.300 | 2.380 | 2.600 | 4.050 |
| 120 | 12 | 0.65 | 0.210 | 0.20 | 0.12 | 0.09 | 0.08 | 0.06 | 0.07 | 0.038 | 0.640 | 0.970 | 1.180 | 1.400 | 1.390 | 2.000 | 2.130 | 2.450 | 3.600 |
| 150 | 15 | 0.82 | 0.235 | 0.22 | 0.14 | 0.10 | 0.09 | 0.07 | 0.08 | 0.04 | 0.600 | 0.850 | 1.150 | 1.300 | 1.240 | 1.800 | 1.870 | 2.270 | 3.340 |
| 180 | 18 | 0.90 | 0.338 | 0.25 | 0.15 | 0.11 | 0.10 | 0.08 | 0.09 | 0.05 | 0.540 | 0.740 | 1.100 | 1.230 | 1.120 | 1.600 | 1.730 | 2.150 | 3.050 |
| 220 | 22 | 1.14 | 0.378 | 0.35 | 0.18 | 0.13 | 0.11 | 0.09 | 0.10 | 0.06 | 0.500 | 0.680 | 1.000 | 1.110 | 1.070 | 1.500 | 1.600 | 1.950 | 2.800 |
| 270 | 27 | 1.39 | 0.522 | 0.45 | 0.20 | 0.15 | 0.12 | 0.10 | 0.11 | 0.07 | 0.430 | 0.620 | 0.860 | 0.970 | 0.940 | 1.300 | 1.440 | 1.760 | 2.500 |
| 330 | 33 | 1.55 | 0.540 | 0.56 | 0.23 | 0.17 | 0.13 | 0.12 | 0.12 | 0.08 | 0.400 | 0.560 | 0.760 | 0.880 | 0.850 | 1.200 | 1.260 | 1.500 | 2.400 |
| 390 | 39 | 2.15 | 0.587 | 0.698 | 0.32 | 0.22 | 0.16 | 0.15 | 0.14 | 0.09 | 0.370 | 0.520 | 0.750 | 0.800 | 0.740 | 1.100 | 1.200 | 1.370 | 2.200 |
| 470 | 47 | 2.44 | 0.844 | 0.72 | 0.37 | 0.25 | 0.18 | 0.17 | 0.17 | 0.11 | 0.360 | 0.440 | 0.730 | 0.720 | 0.680 | 1.100 | 1.100 | 1.280 | 2.000 |
| 560 | 56 | 2.68 | 0.937 | 0.84 | 0.42 | 0.28 | 0.24 | 0.20 | 0.19 | 0.12 | 0.310 | 0.420 | 0.550 | 0.680 | 0.640 | 0.940 | 1.010 | 1.170 | 1.900 |
| 680 | 68 | 3.05 | 1.117 | 0.90 | 0.46 | 0.33 | 0.28 | 0.22 | 0.22 | 0.15 | 0.300 | 0.370 | 0.520 | 0.610 | 0.590 | 0.850 | 0.910 | 1.110 | 1.800 |
| 820 | 82 | 3.48 | 1.200 | 0.95 | 0.60 | 0.41 | 0.37 | 0.25 | 0.25 | 0.19 | 0.280 | 0.300 | 0.500 | 0.580 | 0.540 | 0.780 | 0.850 | 1.000 | 1.600 |
| 101 | 100 | 3.84 | 1.440 | 1.30 | 0.70 | 0.48 | 0.43 | 0.34 | 0.35 | 0.23 | 0.250 | 0.280 | 0.400 | 0.520 | 0.510 | 0.720 | 0.740 | 0.970 | 1.500 |
| 121 | 120 | 5.76 | 1.660 | 1.38 | 0.93 | 0.54 | 0.47 | 0.40 | 0.40 | 0.32 | 0.200 | 0.240 | 0.360 | 0.480 | 0.490 | 0.660 | 0.690 | 0.890 | 1.400 |
| 151 | 150 | 6.62 | 1.880 | 1.81 | 1.10 | 0.75 | 0.64 | 0.54 | 0.47 | 0.37 | 0.190 | 0.220 | 0.300 | 0.400 | 0.400 | 0.580 | 0.610 | 0.780 | 1.300 |
| 181 | 180 | 7.36 | 2.180 | 1.95 | 1.38 | 1.02 | 0.71 | 0.62 | 0.63 | 0.42 | 0.170 | 0.210 | 0.260 | 0.380 | 0.360 | 0.510 | 0.560 | 0.720 | 1.200 |
| 221 | 220 | 8.38 | 2.570 | 2.10 | 1.57 | 1.20 | 0.96 | 0.72 | 0.73 | 0.44 | 0.160 | 0.200 | 0.250 | 0.350 | 0.310 | 1R0 | 0.530 | 0.660 | 1.000 |
| 271 | 270 | 13.69 | 3.520 | 2.42 | 1.85 | 1.31 | 1.11 | 0.95 | 0.97 | 0.55 | 0.140 | 0.180 | 0.210 | 0.280 | 0.290 | 0.420 | 0.450 | 0.570 | 0.950 |
| 331 | 330 | 15.78 | 5.000 | 3.82 | 2.00 | 1.50 | 1.26 | 1.10 | 1.15 | 0.60 | 0.130 | 0.120 | 0.180 | 0.260 | 0.280 | 0.400 | 0.420 | 0.520 | 0.900 |
| 391 | 390 | 17.40 | 6.000 | 4.68 | 2.60 | 2.700 | 1.77 | 1.24 | 1.30 | 0.67 | 0.120 | 0.115 | 0.160 | 0.240 | 0.270 | 0.360 | 0.380 | 0.480 | 0.800 |
| 471 | 470 | 20.00 | 7.000 | 5.10 | 3.00 | 3.000 | 1.96 | 1.53 | 1.48 | 0.88 | 0.084 | 0.110 | 0.150 | 0.220 | 0.250 | 0.340 | 0.350 | 0.420 | 0.700 |
| 561 | 560 |  |  | 6.00 | 4.19 |  |  | 1.80 | 1.90 | 1.04 |  |  | 0.140 | 0.180 |  |  | 0.320 | 0.330 | 0.650 |
| 681 | 680 |  |  | 7.60 | 4.44 |  |  |  | 2.25 | 1.18 |  |  | 0.130 | 0.160 |  |  |  | 0.280 | 0.600 |
| 821 | 820 |  |  | 9.12 | 5.12 |  |  |  | 2.55 | 1.38 |  |  | 0.070 | 0.110 |  |  |  | 0.240 | 0.500 |
| 102 | 1000 |  |  | 9.87 | 10.00 |  |  |  |  | 1.74 |  |  | 0.050 | 0.080 |  |  |  |  | 0.480 |
| 122 | 1200 |  |  |  |  |  |  |  |  | 1.92 |  |  |  |  |  |  |  |  | 0.380 |

## TECHNICAL INFORMATION:

CHARACTERISTICS:
1.TEST FREQ.(L) with HP4284A and HP4285A (equivalent acceptable) $1.0-8.2 \mu \mathrm{H}(7.95 \mathrm{MHz}) \quad 10-82 \mu \mathrm{H}(2.52 \mathrm{MHz}) \quad 100-1200 \mu \mathrm{H}(1 \mathrm{KHz})$
2.Toerance ot inductance

FWSDR0302 $1.0-470 \mu \mathrm{H} \pm 20 \%$ (M)
FWSDR $04031.0-27 \mu \mathrm{H} \pm 20 \%$ (M) $\quad 33-470 \mu \mathrm{H} \pm 10 \%(\mathrm{~K})$
FWSDR0503 $1.0-27 \mu \mathrm{H}+20 \%$ (M)
FWSDR0504 $10-27 \mu \mathrm{H}+20 \%$ (M)
FW SDR0703 $10-47 \mu \mathrm{H} \pm 20 \%$ (M)
FWSDR $070510-470 \mu \mathrm{H} \pm 20 \%$ (M)
FWSDR1004 $10-47 \mu \mathrm{H} \pm 20 \%$ (M)
FW SDR1005 $10-39 \mu \mathrm{H} \pm 20 \%$ (M) $\quad 47-820 \mu \mathrm{H} \pm 10 \%$ (K)
FWSDR1008 $10-82 \mu \mathrm{H} \pm 20 \%$ (M) $\quad 100-1200 \mu \mathrm{H} \pm 10 \%$ (K)
3. DCR: GW813 or QuadTech 1880 Milliohmmeter
4. IDC Max is decreased $10 \%$ against its initial value

Operating Temperature: $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
Storage Temperature: $-40^{\circ} \mathrm{C}$ to $+105^{\circ} \mathrm{C}$
Solder methods: Vapor Phase,Infrared Reflow
Resistance to soldering heat: $260^{\circ} \mathrm{C}$ for 10 seconds
Solvent resistance: Conforms to MIL-STD-202E
Marking: Inductance \& Tolerance
Note:All specification subject to change without noticed.


TERMINAL SHAPE DIMENSION:(mm)

| TYPE | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
| FWSDR 0302 | $3.0 \pm 0.3$ | $2.8 \pm 0.3$ | $2.5 \pm 0.3$ | 0.8 |
| FWSDR 0403 | $4.5 \pm 0.3$ | $4.0 \pm 0.3$ | $3.2 \pm 0.3$ | 1.3 |
| FWSDR 0503 | $5.8 \pm 0.3$ | $5.2 \pm 0.3$ | $2.5 \pm 0.3$ | 1.3 |
| FWSDR 0504 | $5.8 \pm 0.3$ | $5.2 \pm 0.3$ | $4.5 \pm 0.3$ | 1.3 |
| FWSDR 0703 | $7.8 \pm 0.3$ | $7.0 \pm 0.3$ | $3.5 \pm 0.3$ | 2.1 |
| FWSDR 0705 | $7.8 \pm 0.3$ | $7.0 \pm 0.3$ | $5.0 \pm 0.3$ | 2.1 |
| FWSDR 1004 | $10.0 \pm 0.3$ | $9.0 \pm 0.3$ | $4.0 \pm 0.3$ | 2.1 |
| FWSDR 1005 | $10.0 \pm 0.3$ | $9.0 \pm 0.4$ | $5.4 \pm 0.3$ | 2.1 |
| FWSDR 1006 | 11.0 Max | 10.0 Max | 7.5 Max | 2.1 |
| FWSDR 1008 | 11.0 Max | 10.0 Max | 8.5 Max | 2.1 |

