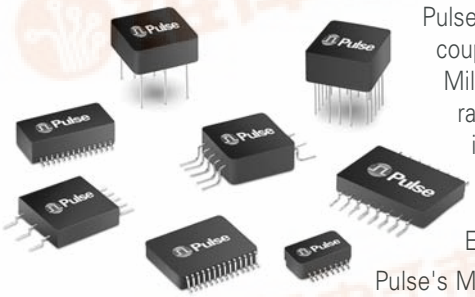
MILITARY/AEROSPACE PRODUCTS



Pulse is one of the leading manufacturers of magnetic interface transformers, data bus couplers, delay lines, Ethernet transformers, and custom electronic components for Military/Aerospace applications. Both catalog and custom designs include a comprehensive range of high-performance solutions and packaging for QPL and non-QPL MIL-STD-1553 interface transformers, various MIL-STD-1553 Data Bus Couplers and QPL and non-QPL active and passive delay lines. In addition, Copperhead transformers and transceivers support a variety of high-speed applications that includes Fibre Channel, Gigabit Ethernet, SONET, HDTV, IEEE1394B, SMTPE, Ethernet and AFDX buses.

Pulse's Military/Aerospace products are designed to meet the most demanding requirements for military, aerospace and industrial applications. For catalog and/or custom designed products, contact Pulse's Military/Aerospace Division at 215-781-6400 or find an authorized distributor or representative on the Pulse website. See back cover.

HIGH SPEED DATA BUS

Copperhead™ Series Transceiver Line Interface Modules

High Speed Data and Communications over 100+ Meters of Copper:

- Withstands infrared and vapor phase soldering
- Military temperature range -55°C to +125°C
- Low transmit/receive jitter
- Low power dissipation; 450 mW typical
- ECL logic interface
- Surface mount – pick and place compatible

Applications:

Fibre Channel, Gigabit Ethernet, SONET, HDTV, IEEE 1394B, SMTPE

Ordering Information[1]

TM 531 D S A 1 (XX)

(XX) – Customer product designator

1
- blank – No transmit driver
- 1 – 1100 mV output transmit driver and military temperature range
- 2 – 1100 mV output transmit drive and industrial temperature range
- 5 – Active cable equalizer circuit

A
- A – 5.00 Volt
- B – 3.30 Volt

S
- S – Impedance matched for STP and Twinax (150 Ω)
- U – Impedance matched for Unshielded Twisted Pair (100 Ω)
- V – Impedance matched for Video and Mini-Coax (75 Ω)
- C – Impedance matched for Coax (50 Ω)

D
- D – Gull wing, DIP, 28-pin package: 0.800"L x 0.400"W x 0.200"H
- F – Gull wing, flatpack, 28-pin package: 0.760"L x 0.610"W x 0.125"H
- H – Gull wing, half-DIP, 16-pin package: 0.300"L x 0.500"W x 0.250"H

531
- 133 – 132.8125 Mbaud version, ⅛ Speed Fibre Channel/ATM
- 266 – 265.625 Mbaud version, ¼ Speed Fibre Channel
- 531 – 531.25 Mbaud version, ½ Speed Fibre Channel
- 1062 – 1.0625 Gbaud version, Full Speed Fibre Channel
- 1250 – 1.250 Gbaud version, Gigabit Ethernet (both short haul and long haul)
- 1485 – 1.485 Gbaud version, SMPTE

(16-pin package is only available on passive units.)

- 2125 – 2.125 Gbaud Double Speed Fiber Channel

*1. **Web:** http://www.pulseeng.com/products/datasheets/fibre.pdf*

Copperhead™ Series [1, 2]

Part Number	Turns Ratio (±5%)	Primary Inductance (µH MIN)	Rise Time (ps MAX @ 20-80%)	DC Resistance (Ω MAX)	Hipot (Vrms MIN)	Insertion Loss (dB MAX)	Application Nominal Bit Rate (Mbaud)
T-330SCT	1CT:1CT	26.0 (@ 1.0 Vrms, 100 kHz)	350	0.2	1500	-1.5 (15-165 MHz)	265.625 (quarter speed)
T-1062SCT	1CT:1CT	3.75 (@ 1.0 Vrms, 100 kHz)	280	0.2	1500	-2.0 (100-625 MHz)	1062.50 (full speed)
T-1250SCT	1CT:1CT	3.75	280	0.2	1500	-2.0	1250
T-1485SCT	1CT:1CT	3.75	280	0.2	1500	-2.0	1485 (SMPTE)
T-3200SCT	1:1	0.70	200	0.2	1500	-4.50	3200

*1. **Web:** http://www.pulseeng.com/products/datasheets/M105.pdf*

*2. **Dual Transformers** designed specifically for Point-to-Point Coupling to 150 Ω Twinax Cable: **Withstands** infrared and vapor phase soldering; **Military Temp Range** = -55°C to +125°C; **Weight** = 1.0 grams; **Surface Mount** = pick-and-place compatible. **Applications:** Fibre Channel, Gigabit Ethernet, SONET, HDTV, IEEE 1394B, SMTPE.*

***Application Notes**: These isolation transformers protect the station from static charges that may develop on the cable and prevent ground loop currents from being transferred between stations. They have also been designed to provide common mode rejection within the transmission band, reducing EMI.*

MILITARY/AEROSPACE ETHERNET/AFDX

10/100

Number of Ports	Part Number	Turns Ratio	Configuration [2] RX	Configuration [2] TX	Package Style	Package Size L/W/H (in.)	Data Sheet [1]
Single	100B-1001	1CT:1CT	T, C, S	T,C	12-pin SMT	.630 / .470 / .185	M101
	100B-1001X	1CT:1CT	T, C, S	T,C	12-pin SMT	.630 / .470 / .185	M101
	100B-1003	1CT:1CT	T,C	T,C	16-pin SOIC	.500 / .265 / .235	M101
	100B-1003X	1CT:1CT	T,C	T,C	16-pin SOIC	.500 / .265 / .235	M101
Dual	100B-2002	1CT:1CT	T, C	T,C	24-pin SMT	.518 / .595 / .241	M110
	100B-2002X	1CT:1CT	T, C	T,C	24-pin SMT	.518 / .595 / .241	M110
Quad	100B-4005	1CT:1CT	T,C	T,C	40-pin SOIC	1.120 / .480 / .280	M102
	100B-4005X	1CT:1CT	T,C	T,C	40-pin SOIC	1.120 / .480 / .280	M102

*1. **Web:** http://www.pulseeng.com/products/datasheets/M101.pdf or M102.pdf*

*2. **T** = Transformer, **C** = Choke, **S** = Shunt inductor, **SMT** = 50 mil pitch leads, **SOIC** = 100 mil pitch leads*

SM = Surface Mount

MILITARY/AEROSPACE PRODUCTS

MILITARY/AEROSPACE ETHERNET/AFDX *(continued)*

Gigabit

Number of Ports	Part Number	Turns Ratio	Configuration [3] RX	Configuration [3] TX	Package Style	Package Size L/W/H (in.)	Data Sheet [1]
Single	1000B-5001	1CT:1CT	T, C, S	T, C, S	24-pin SOIC	.695 / .635 / .230	M106
	1000B-5001X	1CT:1CT	T, C, S	T, C, S	24-pin SOIC	.695 / .635 / .230	M106
	1000B-5002	1CT:1CT	T, C, S	T, C, S	24-pin SOIC	.695 / .635 / .230	M106
	1000B-5002X	1CT:1CT	T, C, S	T, C, S	24-pin SOIC	.695 / .635 / .230	M106
Dual	1000B-5003	1CT:1CT	T, C	T, C	50-pin SOIC [2]	1.095 / .430 / .340	M106
	1000B-5003X	1CT:1CT	T, C	T, C	50-pin SOIC [2]	1.095 / .430 / .340	M106

1. ***Web:*** *http://www.pulseeng.com/products/datasheets/M106.pdf*
2. ***0.99mm*** *(.039") pitch leads*
3. ***T*** *= Transformer,* ***C*** *= Choke,* ***S*** *= Shunt inductor,* ***SMT*** *= 50 mil pitch leads,* ***SOIC*** *= 100 mil pitch leads*

MIL-STD-1553

Non-QPL, Low Profile and Stacked [1]

Part [2] Number	Turns Ratio (±3%)	Impedance (Ω MIN)	Package* L/W/H (in.)	Data Sheet
FL1553-1	1CT:1CT/1CT:.707CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
GL1553-1	1CT:1CT/1CT:.707CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
TL1553-1	1CT:1CT/1CT:.707CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
FL1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .155	NQPLC2 [2,3]
GL1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .155	NQPLC2 [2,3]
TL1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .155	NQPLC2 [2,3]
FL1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
GL1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
TL1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
FL1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
GL1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
TL1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
FL1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
GL1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
TL1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .155	NQPLC2 [2,3]
DFL1553-1	1CT:1CT/1CT:.707CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DGL1553-1	1CT:1CT/1CT:.707CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DTL1553-1	1CT:1CT/1CT:.707CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DFL1553-2	1.4CT:1CT/2CT:1CT	7,200	.930 / .630 / .155	NQPLC2 [2,3]
DGL1553-2	1.4CT:1CT/2CT:1CT	7,200	.930 / .630 / .155	NQPLC2 [2,3]
DTL1553-2	1.4CT:1CT/2CT:1CT	7,200	.930 / .630 / .155	NQPLC2 [2,3]
DFL1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DGL1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DTL1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DFL1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DGL1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DTL1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DFL1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DGL1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
DTL1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.930 / .630 / .155	NQPLC2 [2,3]
STQ1553-1	1CT:1CT/1CT:.707CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
STQ1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .340	NQPLC2 [2,3]
STQ1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
STQ1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
STQ1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SFQ1553-1	1CT:1CT/1CT:.707CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SGQ1553-1	1CT:1CT/1CT:.707CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SFQ1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .340	NQPLC2 [2,3]
SGQ1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .340	NQPLC2 [2,3]
SFQ1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SGQ1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SFQ1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SGQ1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SFQ1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SGQ1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .340	NQPLC2 [2,3]
SLQG1553-1	1CT:1CT/1.4CT:1CT	4,000	.630 / .630 / .280	M104 [2]
SLQG1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .280	M104 [2]
SLQG1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .280	M104 [2]
SLQG1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .280	M104 [2]
SLQG1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .280	M104 [2]
SLQT1553-1	1CT:1CT/1.4CT:1CT	4,000	.630 / .630 / .280	M104 [2]
SLQT1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .280	M104 [2]
SLQT1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .280	M104 [2]
SLQT1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .280	M104 [2]
SLQT1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .280	M104 [2]
SLQF1553-1	1CT:1CT/1.4CT:1CT	4,000	.630 / .630 / .280	M104 [2]
SLQF1553-2	1.4CT:1CT/2CT:1CT	7,200	.630 / .630 / .280	M104 [2]
SLQF1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.630 / .630 / .280	M104 [2]
SLQF1553-5	1CT:2.12CT/1CT:1.5CT	4,000	.630 / .630 / .280	M104 [2]
SLQF1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.630 / .630 / .280	M104 [2]

1. ***Designed*** *and built to conform to MIL-PRF-21038/27*
2. ***Web:*** *http://www.pulseeng.com/products/datasheets/N_QPL_Cat2_links.pdf or M104.pdf*
3. ***Prefix / Operating Temperature : xxxC1553-xx*** */ 0°C to +70°C ;* ***xxxN1553-xx*** */ -40°C to +85°C;* ***xxx1553-xx*** */ -55°C to +125°C*

Interface Transformers: COTS Series [1]

Part [2] Number	Turns Ratio (±3%)	Impedance (Ω MIN)	Package* (L/W/H) in.	Data [3] Sheet
x1553-1	1CT:1CT/1CT:.707CT	4,000	.625 / .625 / .250	NQPLC2
x1553-2	1.4CT:1CT/2CT:1CT	7,200	.625 / .625 / .250	NQPLC2
x1553-3	1.25CT:1CT/1.66CT:1CT	4,000	.625 / .625 / .250	NQPLC2
x1553-5	1CT:2.12CT/1.5CT:1CT	4,000	.625 / .625 / .250	NQPLC2
x1553-45	1CT:2.5CT/1CT:1.79CT	4,000	.625 / .625 / .250	NQPLC2

1. ***Designed*** *and built to conform to MIL-PRF-21038/27*
2. ***Prefix / Operating Temperature: C /*** *0°Cto +70°C;* ***N*** */ -40°C to +85°C;* ***TQ*** */ -55°C to +125°C*
3. ***Web:*** *http://www.pulseeng.com/pdf/N_QPL_Cat2_links.pdf*

Interface Transformers - Low Profile Miniature Series

Part Number	Turns Ratio (±3%)	Impedance (Ω MIN)	Package* (L/W/H) in.	Data Sheet
SMG1553-60	1.25CT:1CT	4,000	.400 / .400 / .185	M112
SMG1553-61	1.66CT:1CT	4,000	.400 / .400 / .185	M112
SMG1553-62	1.41CT:1CT	7,200	.400 / .400 / .185	M112
SMG1553-63	2CT:1CT	7,200	.400 / .400 / .185	M112
SMG1553-65	1CT:1.79CT	4,000	.400 / .400 / .185	M112
SMG1553-66	1CT:2.7CT	4,000	.400 / .400 / .185	M112

***Mounting:** **FP** = Flat Pack **TH** = Through Hole **SM** = Surface Mount

MILITARY/AEROSPACE PRODUCTS

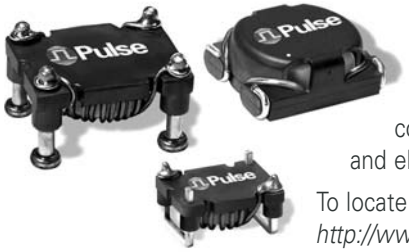
MIL-STD-1553 *(continued)*

QPL Series — Qualified to MIL-PRF-21038/27

Part [1] Number	Military Designation Number	Turns Ratio (±3%)	Impedance (Ω MIN)	Package* L/W/H (in.)	Data [2] Sheet
Q1553-20	M21038/27-05	1:1.41	3,000	.500 / .350 / .250	QPL6
Q1553-21	M21038/27-06	1CT:1CT	3,000	.500 / .350 / .250	QPL6
Q1553-22	M21038/27-07	1CT:1.41CT	3,000	.500 / .350 / .250	QPL6
Q1553-23	M21038/27-08	1CT:1.66CT	3,000	.500 / .350 / .250	QPL6
Q1553-24	M21038/27-09	1CT:2CT	3,000	.500 / .350 / .250	QPL6
Q1553-25	M21038/27-28	1CT:1.5CT	3,000	.500 / .350 / .250	QPL6
Q1553-51	M21038/27-29	1CT:1.79CT	3,000	.500 / .350 / .250	QPL6
Q1553-52	M21038/27-30	1CT:2.5CT	3,000	.500 / .350 / .250	QPL6
Q1553-1	M21038/27-01	1CT:1CT/1CT:.707CT	4,000	.625 / .625 / .250	QPL6
Q1553-2	M21038/27-02	1.4CT:1CT/2CT:1CT	7,200	.625 / .625 / .250	QPL6
Q1553-3	M21038/27-03	1.25CT:1CT/1.66CT:1CT	4,000	.625 / .625 / .250	QPL6
Q1553-5	M21038/27-10	1CT:2.12CT/1CT:1.5CT	4,000	.625 / .625 / .250	QPL6
Q1553-45	M21038/27-26	1CT:2.5CT/1CT:1.79CT	4,000	.625 / .625 / .275	QPL6
Q1553-81	M21038/27-21	1CT:1CT/1CT:.707CT	4,000	.625 / .625 / .275	QPL6
Q1553-82	M21038/27-22	1.4CT:1CT/2CT:1CT	7,200	.625 / .625 / .275	QPL6
Q1553-83	M21038/27-23	1.25CT:1CT/1.66CT:1CT	4,000	.625 / .625 / .275	QPL6
Q1553-84	M21038/27-24	1CT:2.12CT/1CT:1.5CT	4,000	.625 / .625 / .275	QPL6
Q1553-85	M21038/27-25	1CT:2.5CT/1CT:1.79CT	4,000	.625 / .625 / .275	QPL6
FPQ1553-6	M21038/27-16	1CT:1CT/1CT:.707CT	4,000	.625 / .625 / .250	QPL6
SMQ1553-6	M21038/27-11	1CT:1CT/1CT:.707CT	4,000	.625 / .625 / .250	QPL6
FPQ1553-7	M21038/27-17	1.4CT:1CT/2CT:1CT	7,200	.625 / .625 / .250	QPL6
SMQ1553-7	M21038/27-12	1.4CT:1CT/2CT:1CT	7,200	.625 / .625 / .250	QPL6
FPQ1553-8	M21038/27-18	1.25CT:1CT/1.66CT:1CT	4,000	.625 / .625 / .250	QPL6
SMQ1553-8	M21038/27-13	1.25CT:1CT/1.66CT:1CT	4,000	.625 / .625 / .250	QPL6
FPQ1553-10	M21038/27-20	1CT:2.12CT/1CT:1.5CT	4,000	.625 / .625 / .250	QPL6
SMQ1553-10	M21038/27-15	1CT:2.12CT/1CT:1.5CT	4,000	.625 / .625 / .250	QPL6
FPQ1553-45	M21038/27-31	1CT:2.5CT/1CT:1.79CT	4,000	.625 / .625 / .250	QPL6
SMQ1553-45	M21038/27-27	1CT:2.5CT/1CT:1.79CT	4,000	.625 / .625 / .250	QPL6

1. ***Part number options:*** *C and T level QPL testing (xxQC1553-xx, xxQT1553-xx, M21038/27-xxC, M21038/27-xxT).*
2. ***Web:*** *http://www.pulseeng.com/products/datasheets/QPL6.pdf*
3. ***Summary Performance Specifications: Droop*** *= 20%;* ***Overshoot*** *= ±1 VMAX;* ***Common Mode Rejection*** *= 45 dB;* ***Frequency Range*** *(no load) = 75 kHz to 1 MHz;* ***Operating Temperature Range*** *= -55°C to +130°C;* ***Weight*** *= 5 grams;* ***Insulation Resistance*** *= 10 kMΩ @ 250 Vdc;* ***Dielectric Withstanding Voltage*** *= 100 Vrms*

Pulse offers off-the-shelf inductors and transformers for modern military and aerospace power applications--the SLED™, the SLIC, and the POGO™ series. The SLED series consists of rail-mount inductors with a ruggedized header for durable board connections, utilizing two rails for board mounting and cores bonded to high temperature headers for durability and mechanical strength. The SLIC series, self-leaded transformers and inductors, have ruggedized construction. The structural header is bonded to the cores and lead wires, increasing mechanical durability. The POGO series are pad-mounted inductors with open construction for robust board mounting with rugged pins used for both surface board-mounting and electrical connection.



To locate the current data sheets for these products, go to the Pulse website at the following URL: *http://www.pulseeng.com* and click the "Military / Aerospace" tile on the Pulse home page.

OFF-THE-SHELF POWER INDUCTORS & TRANSFORMERS

Toroid Power Inductors - SLED Series

Part Number	@ IRATED (µH)	IRATED (A)	DCR (mΩ MAX)	Inductance @0A$_{DC}$ (µH)	Package* L/W/H (in.)	Data Sheet
SLED 20						
PL8100	1.01	3.40	11	1.1	.400 / .345 / .250	M107
PL8101	6.2	1.40	70	7	.400 / .345 / .250	M107
PL8102	17.6	1.00	125	22.7	.400 / .345 / .250	M107
SLED 30						
PL8110	3.8	4.80	17.3	5.2	.625 / .525 / .400	M107
PL8111	9.4	2.80	43.4	12.3	.625 / .525 / .400	M107
PL8112	29.7	1.40	166	35.3	.625 / .525 / .400	M107
PL8113	114	0.94	380	167	.625 / .525 / .400	M107
SLED 40						
PL8120	2.5	8.00	8.3	3.8	.725 / .575 / .410	M107
PL8121	5.1	5.40	17.7	7.5	.725 / .575 / .410	M107
PL8122	16.2	2.70	72	21.9	.725 / .575 / .410	M107
PL8123	58.1	1.30	290	73	.725 / .575 / .410	M107
PL8124	192	0.90	560	292	.725 / .575 / .410	M107
PL8125	383	0.72	862	672	.725 / .575 / .410	M107
PL8130	4.9	7.80	12.4	7.9	.725 / .575 / .410	M107
PL8131	9	5.50	28	14	.725 / .575 / .410	M107
PL8132	29.1	2.70	100	40.5	.725 / .575 / .410	M107
PL8133	645	0.74	1250	1134	.725 / .575 / .410	M107
PL8150	0.81	14.30	2.5	1.25	.725 / .575 / .410	M107
PL8151	1.32	11.50	4.0	2.1	.725 / .575 / .410	M107

Toroid Power Inductors - SLED Series *(continued*

Part Number	@ IRATED (µH)	IRATED (A)	DCR (mΩ MAX)	Inductance @0A$_{DC}$ (µH)	Package* L/W/H (in.)	Data Sheet
SLED 50						
PL8140	9.3	7.20	18.7	16	.900 / .690 / .520	M107
PL8141	16.1	5.10	32.0	25.9	.900 / .690 / .520	M107
PL8142	50	2.60	133	72.9	.900 / .690 / .520	M107
PL8143	x1070	0.71	1700	1950	.900 / .690 / .520	M107
PL8160	1.68	13.90	3.6	2.8	.900 / .690 / .520	M107
PL8161	2.5	11.40	5.4	4.2	.900 / .690 / .520	M107
PL8170	3.5	12.40	6.6	6.5	.900 / .690 / .520	M107
PL8171	4.7	10.40	8.3	8.4	.900 / .690 / .520	M107

SMT Common Mode Chokes: SLIC Series

Part Number	Inductance (mH ±35%)	IRATED (A)	DCR (mΩ MAX)	Package* L/W/H (in.)	Data Sheet
PL8200	0.47	14.0	8	1.220 / 1.000 / .500	M108
PL8201	0.63	11.6	10	1.220 / 1.000 / .500	M108
PL8202	0.81	9.70	14	1.220 / 1.000 / .500	M108
PL8203	0.53	7.20	15	1.110 / 1.00 / 395	M108
PL8204	0.59	5.60	21	.770 / .670 / .395	M108
PL8205	0.77	4.70	40	.770 / .670 / .395	M108
PL8206	0.22	3.30	60	.770 / .670 / .390	M108
PL8207	1.32	3.30	60	.770 / .670 / .395	M108
PL8208	1.47	2.80	80	.770 / .670 / .395	M108
PL8209	0.88	1.63	110	.500 / .500 / .215	M108
PL8210	1.17	1.22	200	.500 / .500 / .215	M108

***Mounting:** **FP** = Flat Pack **TH** = Through Hole **SM** = Surface Mount

MILITARY/AEROSPACE PRODUCTS

OFF-THE-SHELF POWER INDUCTORS & TRANSFORMERS *(continued)*

SMT Power Inductors: SLIC (HCCI-80) Series

Part Number[1]	@ IRATED (µH)	IRATED (A)	DCR (mΩ) MAX	Inductance @0ADC (µH)	Package* L/W/H (in.)	Data Sheet
PL8304 P	1.1	38	1.3	2.1	1.220 / 1.000 / .500	M109
PL8303 P	1.6	34	1.6	3.5	1.220 / 1.000 / .500	M109
PL8302 P	2.45	27	2.5	5.1	1.220 / 1.000 / .500	M109
PL8301 P	3.2	24	3.5	7.2	1.220 / 1.000 / .500	M109
PL8304 S	4.3	19	5.1	8.4	1.220 / 1.000 / .500	M109
PL8300 P	4.52	19	4.8	9.5	1.220 / 1.000 / .500	M109
PL8303 S	6.4	17	6.4	13.8	1.220 / 1.000 / .500	M109
PL8302 S	9.8	13.5	10.1	20.4	1.220 / 1.000 / .500	M109
PL8301 S	12.8	12	13.8	28.7	1.220 / 1.000 / .500	M109
PL8300 S	18.1	9.5	19.3	38.0	1.220 / 1.000 / .500	M109

1. Connection: ***P*** *= Parallel,* ***S*** *= Series*

SMT Power Inductors: Toroid, POGO Series

POGO 40						
PL8400 S	43.6	1.1	309	77	.725 / .575 / .380	M111
POGO 50						
PL8401 S	21.9	2.7	90.5	39.5	.910 / .700 / .510	M111
PL8402 S	4.025	6.4	23	6.575	.910 / .700 / .510	M111
PL8403 P	0.53	23.8	3	0.88	.910 / .700 / .510	M111
PL8404 P	1.1	21	2.5	2.1	.910 / .700 / .510	M111
POGO 60						
PL8405 P	2.1	22.4	3.4	4	1.280 / 1.070 / .510	M111

1. Connection: ***P*** *= Parallel,* ***S*** *= Series*

SMT Power Inductors: Toroid, SLED Series

SLED 25						
PL8500	9.4	3.8	32	10.4	.625 / .525 / .310	M113
PL8501	13.3	3.2	46	14.6	.625 / .525 / .310	M113
PL8502	23	2.4	74	25	.625 / .525 / .310	M113
PL8503	50	1.6	135	56	.625 / .525 / .310	M113
PL8504	75	1.3	220	83	.625 / .525 / .310	M113
PL8505	90	1.2	285	100	.625 / .525 / .310	M113
PL8506	137	1	425	152	.625 / .525 / .310	M113
PL8507	200	.82	673	220	.625 / .525 / .310	M113
PL8508	305	.66	972	331	.625 / .525 / .310	M113
PL8509	439	.56	1520	472	.625 / .525 / .310	M113

SMT Power Inductors: Toroid, POGO Series

POGO 25						
PL8600 P	2.0	8.30	7.6	2.2	.625 / .525 / .310	M114
PL8601 P	2.4	7.20	10.9	2.6	.625 / .525 / .310	M114
PL8602 P	5.0	5.20	19.0	5.5	.625 / .525 / .310	M114
PL8600 S	7.0	4.16	16.0	8.75	.625 / .525 / .310	M114
PL8603 P	9.3	3.80	29.8	10.4	.625 / .525 / .310	M114
PL8601 S	8.4	3.78	21.8	10.4	.625 / .525 / .310	M114
PL8604 P	14.1	3.10	45.3	15.7	.625 / .525 / .310	M114
PL8605 P	19.8	2.6	66.3	22.1	.625 / .525 / .310	M114
PL8602 S	17.9	2.6	38.0	22.45	.625 / .525 / .310	M114
PL8606 P	29.3	2.20	106	32.8	.625 / .525 / .310	M114
PL8603 S	33.8	1.89	60	41.7	.625 / .525 / .310	M114
PL8607 P	42.6	1.80	151	47.6	.625 / .525 / .310	M114
PL8604 S	50.9	1.54	91	62.8	.625 / .525 / .310	M114
PL8608 P	61.3	1.50	224	67.5	.625 / .525 / .310	M114
PL8605 S	71.5	1.30	133	88.2	.625 / .525 / .310	M114
PL8609 P	84.2	1.20	324	91.0	.625 / .525 / .310	M114
PL8606 S	106.1	1.07	202	131.0	.625 / .525 / .310	M114
PL8607 S	154.2	0.89	302	190.3	.625 / .525 / .310	M114
PL8608 S	218.9	0.74	444	270.2	.625 / .525 / .310	M114
PL8609 S	295.0	0.64	636	364.0	.625 / .525 / .310	M114
POGO 40						
PL8700 P	1.5	14.40	4.41	2.2	.725 / .600 / .380	M115
PL8701 P	2.4	11.20	6.54	3.5	.725 / .600 / .380	M115
PL8702 P	4.2	8.20	10.47	5.9	.725 / .600 / .380	M115
PL8703 P	5.8	6.80	14.94	7.9	.725 / .600 / .380	M115
PL8700 S	6.1	7.20	17.60	9.0	.725 / .600 / .380	M115
PL8704 P	7.6	5.70	20.99	10.1	.725 / .600 / .380	M115

SMT Power Inductors: Toroid, POGO Series *(continued)*

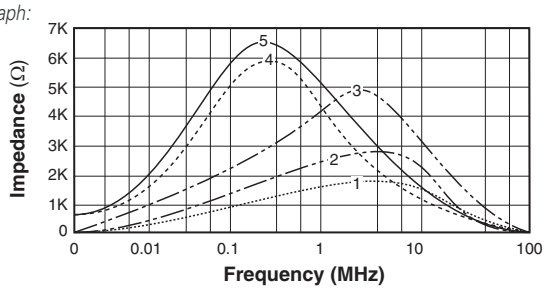
Part Number[1]	@ IRATED (µH)	IRATED (A)	DCR (mΩ) MAX	Inductance @0ADC (µH)	Package* L/W/H (in.)	Data Sheet
POGO 40 *(continued)*						
PL8701 S	9.7	5.60	26.20	14.0	.725 / .600 / .380	M115
PL8705 P	12.1	5.40	23.24	18.5	.725 / .600 / .380	M115
PL8702 S	17.0	4.10	41.90	23.7	.725 / .600 / .380	M115
PL8706 P	18.0	4.40	38.15	27.4	.725 / .600 / .380	M115
PL8703 S	23.1	3.40	59.70	31.5	.725 / .600 / .380	M115
PL8707 P	27.0	3.54	53.21	40.5	.725 / .600 / .380	M115
PL8704 S	30.6	2.85	84.00	40.5	.725 / .600 / .380	M115
PL8708 P	34.8	3.00	73.89	50.5	.725 / .600 / .380	M115
PL8705 S	48.5	2.70	93.00	74.1	.725 / .600 / .380	M115
PL8706 S	72.0	2.20	152.60	109.8	.725 / .600 / .380	M115
PL8708 S	139.1	1.50	295.60	202.2	.725 / .600 / .380	M115
PL8707 S	108.0	1.77	212.80	161.8	.725 / .600 /.380	M115

1. Connection: ***P*** *= Parallel,* ***S*** *= Series*

SMT Common Mode Inductors: Toroid, POGO Series

Part Number	Inductance (mH ±30%)	IRATED (A)	DCR (mΩ) MAX	SRF (MHz)	Impedance Curve[1]	Package L/W/H (in.)	Data Sheet
POGO 40							
PL8801	1.5	1.50	60	2	2	.725 / .575 / .380	M116
PL8803	10.0	1.00	450	0.5	4	.725 / .575 / .380	M116
PL8804	22.0	0.50	850	0.3	5	.725 / .575 / .380	M116
POGO 50							
PL8800	1.0	3.60	50	4	1	.910 / .700 / .510	M116
PL8802	3.0	2.50	80	2.2	3	.910 / .700 / .510	M116

1. See *graph:*



SMT Power Inductors: Shielded Drum Core

Part Number	Inductance @IRATED (µH TYP)	IRATED[1] (A)	DCR (mΩ MAX)	Inductance @0ADC[2] (µH)	Saturation Current @25°C	Package L/W/H (in.)	Data Sheet
PL8901	0.80	11	4.0	1.0 [2]	14	.413 / .413 / .280	M117
PL8902	1.20	10	6.0	1.5 [2]	13	.413 / .413 / .280	M117
PL8903	2.1	9.0	7.3	2.7 [2]	11	.413 / .413 / .280	M117
PL8904	2.9	8.0	8.5	3.7 [2]	9.2	.413 / .413 / .280	M117
PL8905	3.7	7.3	9.5	4.7 [2]	8.2	.413 / .413 / .280	M117
PL8906	4.8	6.0	16.5	6.0 [2]	6.9	.413 / .413 / .280	M117
PL8907	6	5.5	18.5	7.6 [2]	6.2	.413 / .413 / .280	M117
PL8908	8	5.0	21.8	10	5.5	.413 / .413 / .280	M117
PL8909	9.6	4.5	29.0	12	5.1	.413 / .413 / .280	M117
PL8910	12	4.1	35.4	15	4.4	.413 / .413 / .280	M117
PL8911	14.4	4.0	37.0	18	4.3	.413 / .413 / .280	M117
PL8912	17.6	3.8	42.0	22	3.8	.413 / .413 / .280	M117
PL8913	21.6	3.4	45.9	27	3.4	.413 / .413 / .280	M117
PL8914	26.4	3.0	64.8	33	3.0	.413 / .413 / .280	M117
PL8915	31.2	2.7	81.5	39	2.8	.413 / .413 / .280	M117
PL8916	37.6	2.6	89.0	47	2.6	.413 / .413 / .280	M117
PL8917	54.4	2.1	135.0	68	2.1	.413 / .413 / .280	M117

1. The rated *current as listed is either the saturation current or the heating current depending on which value is lower.*

2. Inductance *at 0ADC tolerance is ±30%. The tolerance is ±20% on all other parts.*

Optional *Tape and Reel packaging can be ordered by adding a* ***"T"*** *suffix to the end of the part number.*

SM = Surface Mount