

»Performance Specification

Model	I-hold	I-trip	Vmax	Imax	Pd typ	Max. Time to trip		R0 min (Ohm)	R1max (Ohm)
	(A)	(A)	(Vdc)	(A)	(W)	Current (A)	Time (Sec.)		
	(A)	(A)	(Vdc)	(A)	(W)	(A)	(Sec.)		
SMD1206-005/30N	0.05	0.15	30.00	40.00	0.60	0.25	1.50	2.50	40.00
SMD1206-005/60N	0.05	0.15	60.00	10.00	0.60	0.25	1.50	2.50	40.00
SMD1206-010/30N	0.10	0.25	30.00	40.00	0.60	0.50	1.50	1.40	15.00
SMD1206-010/60N	0.10	0.25	60.00	10.00	0.60	0.50	1.50	1.40	15.00
SMD1206-012/30N	0.12	0.29	30.00	100.00	0.60	1.00	0.20	1.35	8.50
SMD1206-012/48N	0.12	0.29	48.00	100.00	0.60	1.00	0.20	1.40	6.50
SMD1206-012/60N	0.12	0.29	60.00	10.00	0.60	1.00	0.20	1.35	8.50
SMD1206-016/48N	0.16	0.45	48.00	10.00	0.60	1.00	0.30	1.10	5.00
SMD1206-020/24N	0.20	0.40	24.00	100.00	0.60	8.00	0.10	0.50	2.60
SMD1206-020/30N	0.20	0.40	30.00	100.00	0.60	8.00	0.10	0.50	2.60
SMD1206-025/16N	0.25	0.50	16.00	100.00	0.60	8.00	0.08	0.40	2.40
SMD1206-025/24N	0.25	0.50	24.00	100.00	0.60	8.00	0.08	0.40	2.40
SMD1206-025/30N	0.25	0.50	30.00	100.00	0.60	8.00	0.08	0.40	2.40
SMD1206-025/48N	0.25	0.50	48.00	40.00	0.60	8.00	0.08	0.40	2.70
SMD1206-035/16N	0.35	0.70	16.00	100.00	0.60	8.00	0.10	0.30	1.20
SMD1206-035/30N	0.35	0.70	30.00	100.00	0.60	8.00	0.10	0.30	1.40
SMD1206-035/30SN	0.35	0.70	30.00	100.00	0.60	8.00	0.10	0.30	1.20
SMD1206-050/6N	0.50	1.00	6.00	100.00	0.60	8.00	0.10	0.15	0.75
SMD1206-050/8N	0.50	1.00	8.00	100.00	0.60	8.00	0.10	0.15	0.75
SMD1206-050/16N	0.50	1.00	16.00	100.00	0.60	8.00	0.10	0.15	0.75
SMD1206-050/24N	0.50	1.00	24.00	100.00	0.60	8.00	0.10	0.15	1.00
SMD1206-050/30N	0.50	1.00	30.00	100.00	0.60	8.00	0.10	0.15	1.00
SMD1206-075/8N	0.75	1.50	8.00	100.00	0.60	8.00	0.20	0.09	0.40
SMD1206-075/13.2N	0.75	1.50	13.20	100.00	0.60	8.00	0.20	0.09	0.40
SMD1206-075/16N	0.75	1.50	16.00	100.00	0.60	8.00	0.20	0.09	0.50
SMD1206-075/24N	0.75	1.50	24.00	100.00	0.60	8.00	0.20	0.09	0.50
SMD1206-075/30N	0.75	1.50	30.00	100.00	0.60	8.00	0.20	0.09	0.50
SMD1206-100/6N	1.00	2.00	6.00	100.00	0.80	8.00	0.10	0.04	0.21
SMD1206-100/8N	1.00	2.00	8.00	100.00	0.80	8.00	0.10	0.04	0.21
SMD1206-100/12N	1.00	2.00	12.00	100.00	0.80	8.00	0.10	0.04	0.25
SMD1206-100/16N	1.00	2.00	16.00	100.00	0.80	8.00	0.10	0.04	0.25
SMD1206-100/24N	1.00	2.00	24.00	40.00	0.80	8.00	0.10	0.04	0.27
SMD1206-110/6N	1.10	2.20	6.00	100.00	0.80	8.00	0.10	0.04	0.21
SMD1206-110/8N	1.10	2.20	8.00	100.00	0.80	8.00	0.10	0.04	0.21
SMD1206-110/12N	1.10	2.20	12.00	100.00	0.80	8.00	0.10	0.04	0.25
SMD1206-110/16N	1.10	2.20	16.00	100.00	0.80	8.00	0.10	0.04	0.25
SMD1206-110/24N	1.10	2.20	24.00	40.00	0.80	8.00	0.10	0.04	0.27
SMD1206-125/6N	1.25	2.50	6.00	100.00	0.80	8.00	0.50	0.035	0.16
SMD1206-125/8N	1.25	2.50	8.00	100.00	0.80	8.00	0.50	0.035	0.16

SMD1206-150/6N	1.50	3.00	6.00	100.00	0.80	8.00	0.30	0.03	0.15
SMD1206-150/8N	1.50	3.00	8.00	100.00	0.80	8.00	0.30	0.03	0.15
SMD1206-150/12N	1.50	3.00	12.00	100.00	0.80	8.00	0.30	0.03	0.15
SMD1206-150/16N	1.50	3.00	16.00	100.00	0.80	8.00	0.30	0.03	0.15
SMD1206-175/6N	1.75	3.50	6.00	100.00	0.80	8.00	0.50	0.02	0.09
SMD1206-200/6N	2.00	4.00	6.00	100.00	0.80	8.00	0.50	0.018	0.085
SMD1206-200/10N	2.00	4.00	10.00	40.00	0.80	8.00	0.50	0.018	0.100
SMD1206-200/12N	2.00	4.00	12.00	40.00	0.80	8.00	0.50	0.018	0.100

I-hold: Holding Current: maximum current at which the device will not trip in 25°C still air.

I-trip: Tripping Current: minimum current at which the device will trip in 25°C still air.

Vmax: Maximum voltage device can withstand without damage at rated current(I_{max}).

I_{max}: Maximum fault current device can withstand without damage at rated voltage(V_{max}).

P_{d typ}: Typical power dissipated from device when in the tripped state at 25°C still air.

R_{0 min}: Minimum resistance of device in initial (un-soldered) state.

R_{1 max}: Maximum resistance of device at 25°C measured one hour after tripping or reflow soldering of 260°C for 20 sec.

»Environmental Specifications

Operating Temperature	-40 °C to +85 °C
Maximum Device Surface Temperature in Tripped State	125°C
Passive Aging	+85 °C, 1000 hours ; ±5 % typical resistance change
Humidity Aging	+85 °C, 85 % R.H. 1000 hours; ±5 % typical resistance change
Thermal Shock	MIL-STD-202, Method 107; +85 °C to -40 °C, 20 times; -30 % typical resistance change
Solvent Resistance	MIL-STD-202, Method 215 ; No change
Vibration	MIL-STD-883, Method 2007, Condition A; No change
Moisture Sensivity Level	Level 1, J-STD-020
Storage Conditions	+40 °C Max. 70% RH Max. Packed in original packaging.

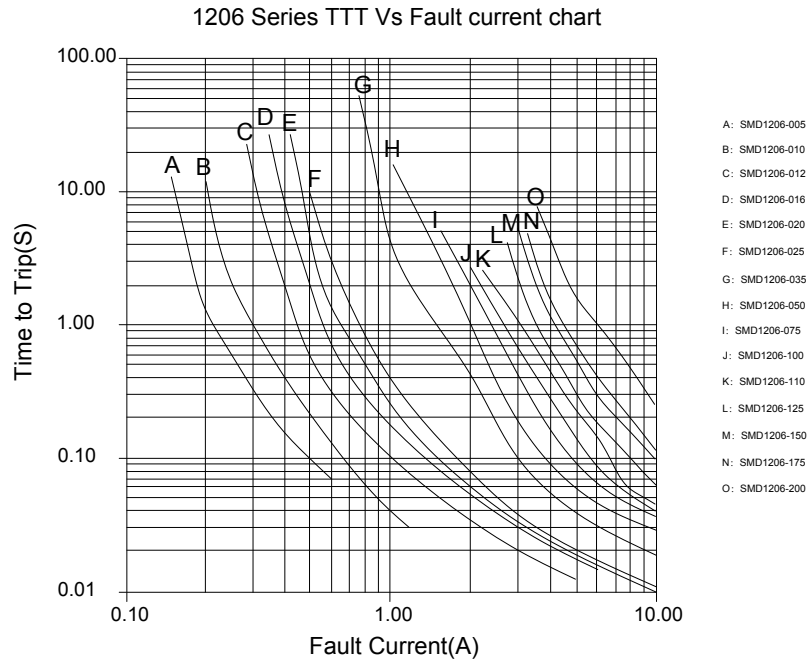
»Test Procedures And Requirements

No.	Test	Test Conditions	Accept/Reject Criteria
1	R _{0 min}	Resistance measurement at 25°C	$R_{0min} \leq R \leq R_{1max}$
2	R _{1 max}	Resistance measurement one hour after post trip	$R_{0min} \leq R \leq R_{1max}$
3	I-hold	Hold rated current 1800 second without trip, @ 25°C	No trip
4	I-trip	Device must trip within 900 second under rated current, @25°C	Trip
5	Max. time to trip	At specified current, 25°C	$T \leq \text{max. time to trip (seconds)}$
6	Trip Cycle Life	V _{max} , I _{max} , 100 cycles	No arcing or burning
7	Trip Endurance	V _{max} , I _{max} 24 hours	No arcing or burning
8	Solderability	ANSI/J-STD-002	95 % min. coverage

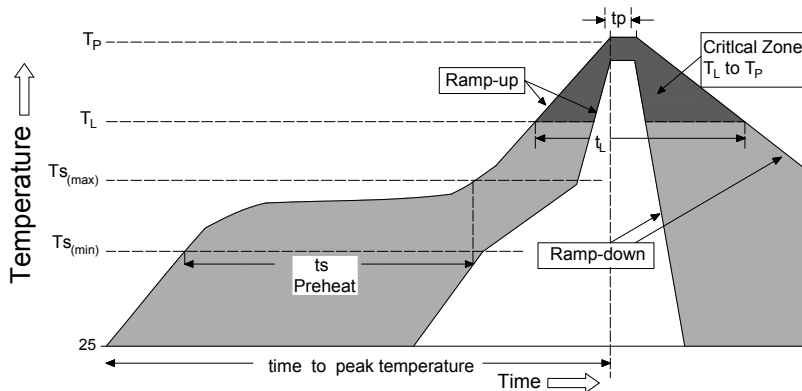
»Thermal Derating Chart Recommended Hold Current(A) at Ambient Temperature(°C)

Model	Ambient Operating Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD1206-005/30N	0.076	0.068	0.060	0.050	0.043	0.039	0.034	0.030	0.023
SMD1206-005/60N	0.076	0.068	0.060	0.050	0.043	0.039	0.034	0.030	0.023
SMD1206-010/30N	0.156	0.139	0.120	0.100	0.083	0.074	0.065	0.056	0.042
SMD1206-010/60N	0.156	0.139	0.120	0.100	0.083	0.074	0.065	0.056	0.042
SMD1206-012/30N	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.05
SMD1206-012/48N	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.05
SMD1206-012/60N	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.05
SMD1206-016/48N	0.22	0.20	0.18	0.16	0.14	0.13	0.12	0.11	0.09
SMD1206-020/24N	0.28	0.25	0.23	0.20	0.17	0.15	0.14	0.12	0.09
SMD1206-020/30N	0.28	0.25	0.23	0.20	0.17	0.15	0.14	0.12	0.09
SMD1206-025/16N	0.37	0.33	0.29	0.25	0.22	0.2	0.17	0.15	0.12
SMD1206-025/24N	0.37	0.33	0.29	0.25	0.22	0.2	0.17	0.15	0.12
SMD1206-025/30N	0.37	0.33	0.29	0.25	0.22	0.2	0.17	0.15	0.12
SMD1206-025/48N	0.37	0.33	0.29	0.25	0.22	0.2	0.17	0.15	0.12
SMD1206-035/16N	0.50	0.45	0.40	0.35	0.30	0.27	0.24	0.21	0.15
SMD1206-035/30N	0.50	0.45	0.40	0.35	0.30	0.27	0.24	0.21	0.15
SMD1206-035/30SN	0.50	0.45	0.40	0.35	0.30	0.27	0.24	0.21	0.15
SMD1206-050/6N	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206-050/8N	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206-050/16N	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206-050/24N	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206-050/30N	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206-075/8N	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206-075/13.2N	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206-075/16N	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206-075/24N	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206-075/30N	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206-100/6N	1.49	1.33	1.18	1.00	0.84	0.75	0.73	0.59	0.47
SMD1206-100/8N	1.49	1.33	1.18	1.00	0.84	0.75	0.73	0.59	0.47
SMD1206-100/12N	1.49	1.33	1.18	1.00	0.84	0.75	0.73	0.59	0.47
SMD1206-100/16N	1.49	1.33	1.18	1.00	0.84	0.75	0.73	0.59	0.47
SMD1206-100/24N	1.49	1.33	1.18	1.00	0.84	0.75	0.73	0.59	0.47
SMD1206-110/6N	1.64	1.46	1.30	1.10	0.92	0.83	0.80	0.65	0.52
SMD1206-110/8N	1.64	1.46	1.30	1.10	0.92	0.83	0.80	0.65	0.52
SMD1206-110/12N	1.64	1.46	1.30	1.10	0.92	0.83	0.80	0.65	0.52
SMD1206-110/16N	1.64	1.46	1.30	1.10	0.92	0.83	0.80	0.65	0.52
SMD1206-110/24N	1.64	1.46	1.30	1.10	0.92	0.83	0.80	0.65	0.52
SMD1206-125/6N	1.83	1.65	1.43	1.25	1.09	0.96	0.87	0.76	0.60
SMD1206-125/8N	1.83	1.65	1.43	1.25	1.09	0.96	0.87	0.76	0.60
SMD1206-150/6N	2.20	1.99	1.77	1.50	1.34	1.23	1.10	1.01	0.84
SMD1206-150/8N	2.20	1.99	1.77	1.50	1.34	1.23	1.10	1.01	0.84
SMD1206-150/12N	2.20	1.99	1.77	1.50	1.34	1.23	1.10	1.01	0.84
SMD1206-150/16N	2.20	1.99	1.77	1.50	1.34	1.23	1.10	1.01	0.84
SMD1206-175/6N	2.50	2.25	2.00	1.75	1.55	1.45	1.35	1.25	1.10
SMD1206-200/6N	2.60	2.44	2.35	2.00	1.78	1.67	1.50	1.45	1.10
SMD1206-200/10N	2.60	2.44	2.35	2.00	1.78	1.67	1.50	1.45	1.10
SMD1206-200/12N	2.60	2.44	2.35	2.00	1.78	1.67	1.50	1.45	1.10

»Typical time to trip at 25°C



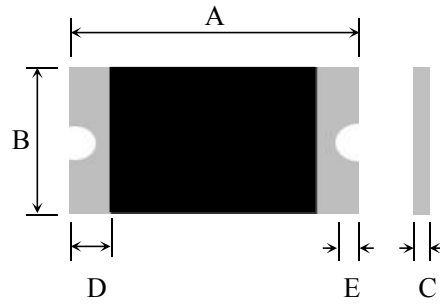
»Soldering Parameters



Profile Feature		Pb-Free Assembly
Average Ramp-Up Rate (TS(max) to TP)		3°C/second max
Pre Heat:	Temperature Min (TS(min))	150°C
	Temperature Max (TS(max))	200°C
	Time (Min to Max) (ts)	60 – 180 secs
Time Maintained Above:	Temperature (TL)	217°C
	Temperature (tL)	60 – 150 seconds
Peak / Classification Temperature (TP)		260 ^{+0/-5} °C
Time within 5°C of actual peak Temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (TP)		8 minutes Max.

- ◆All temperature refer to topside of the package, measured on the package body surface
- ◆If reflow temperature exceeds the recommended profile, devices may not meet the performance requirements
- ◆Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment for lead
- ◆Recommended maximum paste thickness is 0.25mm (0.010inch)
- ◆Devices can be cleaned using standard industry methods and solvents

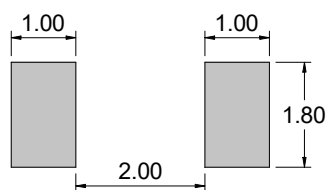
»Physical Dimensions(mm)



Model	A		B		C		D		E
	Min	Max	Min	Max	Min	Max	Min	Max	Min
SMD1206-005/30N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-005/60N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-010/30N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-010/60N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-012/30N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-012/48N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-012/60N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-016/48N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-020/24N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-020/30N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-025/16N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-025/24N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-025/30N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-025/48N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-035/16N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-035/30N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-035/30SN	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-050/6N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-050/8N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-050/16N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-050/24N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-050/30N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-075/8N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-075/13.2N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-075/16N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-075/24N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-075/30N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-100/6N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10

Model	A		B		C		D		E
	Min	Max	Min	Max	Min	Max	Min	Max	Min
SMD1206-100/8N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-100/12N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-100/16N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-100/24N	3.00	3.40	1.40	1.80	0.90	1.30	0.25	0.75	0.10
SMD1206-110/6N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-110/8N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-110/12N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-110/16N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-110/24N	3.00	3.40	1.40	1.80	0.90	1.30	0.25	0.75	0.10
SMD1206-125/6N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-125/8N	3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10
SMD1206-150/6N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-150/8N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-150/12N	3.00	3.40	1.40	1.80	0.90	1.30	0.25	0.75	0.10
SMD1206-150/16N	3.00	3.40	1.40	1.80	0.90	1.30	0.25	0.75	0.10
SMD1206-175/6N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-200/6N	3.00	3.40	1.40	1.80	0.65	1.15	0.25	0.75	0.10
SMD1206-200/10N	3.00	3.40	1.40	1.80	0.90	1.30	0.25	0.75	0.10
SMD1206-200/12N	3.00	3.40	1.40	1.80	0.90	1.30	0.25	0.75	0.10

»Recommended Pad Layout (mm)&Physical Specifications



Terminal Material	Tin-Plated Nickel-Copper (Solder Material: Matte Tin (Sn))
Lead Solderability	Meets EIA Specification RS186-9E, ANSI/J-STD-002 Category 3.

»Tape And Reel Specifications (mm)&Packaging quantity

TAPE SPECIFICATIONS: EIA-481-1 (mm)					
Item	SMD1206-020/24N	SMD1206-020/30N	SMD1206-005/30N	SMD1206-005/60N	SMD1206-100/24N
	SMD1206-025/16N	SMD1206-025/24N	SMD1206-010/30N	SMD1206-010/60N	SMD1206-110/24N
	SMD1206-025/30N	SMD1206-035/16N	SMD1206-012/30N	SMD1206-012/48N	SMD1206-150/12N
	SMD1206-035/30SN	SMD1206-050/6N	SMD1206-012/60N	SMD1206-016/48N	SMD1206-150/16N
	SMD1206-050/8N	SMD1206-050/16N	SMD1206-025/48N	SMD1206-035/30N	SMD1206-200/10N
	SMD1206-075/8N	SMD1206-075/13.2N	SMD1206-050/24N	SMD1206-050/30N	SMD1206-200/12N
	SMD1206-100/6N	SMD1206-100/8N	SMD1206-075/16N	SMD1206-075/24N	
	SMD1206-110/6N	SMD1206-110/8N	SMD1206-075/30N	SMD1206-100/12N	
	SMD1206-125/6N	SMD1206-125/8N	SMD1206-100/16N	SMD1206-110/12N	
			SMD1206-110/16N	SMD1206-150/6N	
		SMD1206-150/8N	SMD1206-175/6N		
		SMD1206-200/6N			
W	8.10±0.10		8.10±0.10		8.10±0.10
F	3.50±0.05		3.50±0.05		3.50±0.05
E1	1.75±0.10		1.75±0.10		1.75±0.10
D0	1.55±0.05		1.55±0.05		1.55±0.05
D1	1.00 min		1.00 min		1.00 min
P0	4.0±0.10		4.0±0.10		4.0±0.10
P1	4.0±0.10		4.0±0.10		4.0±0.10
P2	2.0±0.05		2.0±0.05		2.0±0.05
A0	1.90±0.10		2.00±0.10		2.00±0.10
B0	3.45±0.10		3.50±0.10		3.50±0.10
T	0.25±0.05		0.25±0.05		0.25±0.05
K0	0.85±0.10		1.05±0.10		1.30±0.10
Leader	390mm		390mm		390mm
Trailer	160mm		160mm		160mm
Q'ty	4,000pcs/Reel		3,500pcs/Reel		3,500pcs/Reel

REEL DIMENSIONS: EIA-481-1 (mm)	
C	Ø178±1.0
D	Ø60.2±0.5
W	9.0±1.5
H	11.0±0.5

