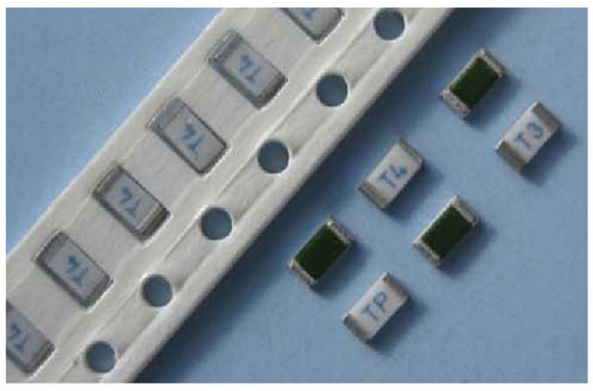
Type C1T

Surface Mount Slow Blow Chip Fuse

HF Pb C1T Series - 1206 Size — RoHS 6 Compliant

Features

- Slow Blow
- Small size, 1206 SMD
- Current rating from 750mA to 5A
- Wide operating temperature range from -55 °C to 125 °C
- Tape and Reel for automatic SMD placement
- Compatible with reflow and wave soldering
- RoHS 6 compliant (MSL = 1)
- Halogen Free
- Leadfree



Applications

- Notebook
- LCD monitor
- PC computer
- Office electronic equipment
- Industrial equipment
- Medical equipment
- POE, POE+
- LCD / LED monitor
- Power supply
- LCD / LED TV
- DC-DC Converter

LEAD FREE = Pb

HALOGEN FREE = HF

Typical Part Marking

Fuse body (ceramic white side) marked with marking code.

Example:



Current Rating	Marking Code	Current Rating	Marking Code
750mA	TM	2.5A	TT
1A	T1	3A	T3
1.25A	TP	3.5A	TZ
1.5A	TR	4A	T4
2A	T2	5A	T5

Electrical Characteristics (UL STD. 248-14)

Testing Current	Blow Time	
	Minimum	Maximum
100%	4 Hrs.	N/A
200%	1 Sec	120 Sec
300%	0.1 Sec	3 Sec
800%	0.002 Sec	0.05 Sec

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE	VOLTAGE RATING (V)	AMPERE RANGE / VOLT @ I.R. ABILITY*
cULus	E20624	750mA - 5A / 63V AC/DC	750mA - 5A / 50A@ 63V AC/DC

* I.R. = INTERRUPTING RATING = SHORT CIRCUIT RATING (AMPS)

Physical Specifications

Materials	Body : Ceramic Substrate
	Terminations : Ag / Ni / Sn (100% Lead-free)
	Element Cover Coating : Lead-free Glass
Marking	On Fuse :
	Marking Code
	On Label :
	"bel", "C1T", "Current Rating", "Voltage Rating", "Interrupting Rating", " Appropriate Safety Logos" and " ", " "(China RoHS compliant).

Specifications subject to change without notice

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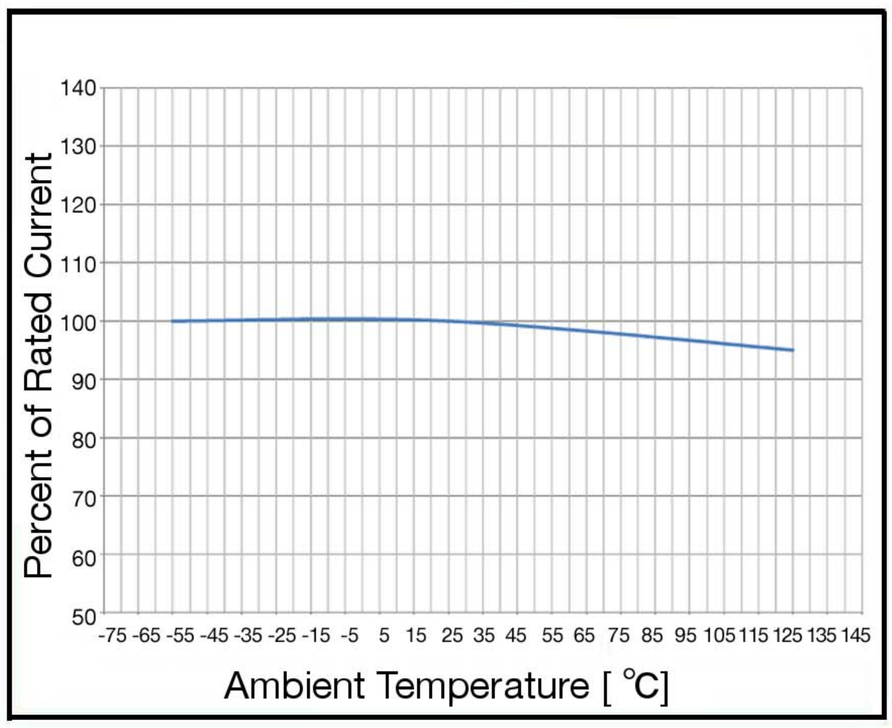
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Type C1T

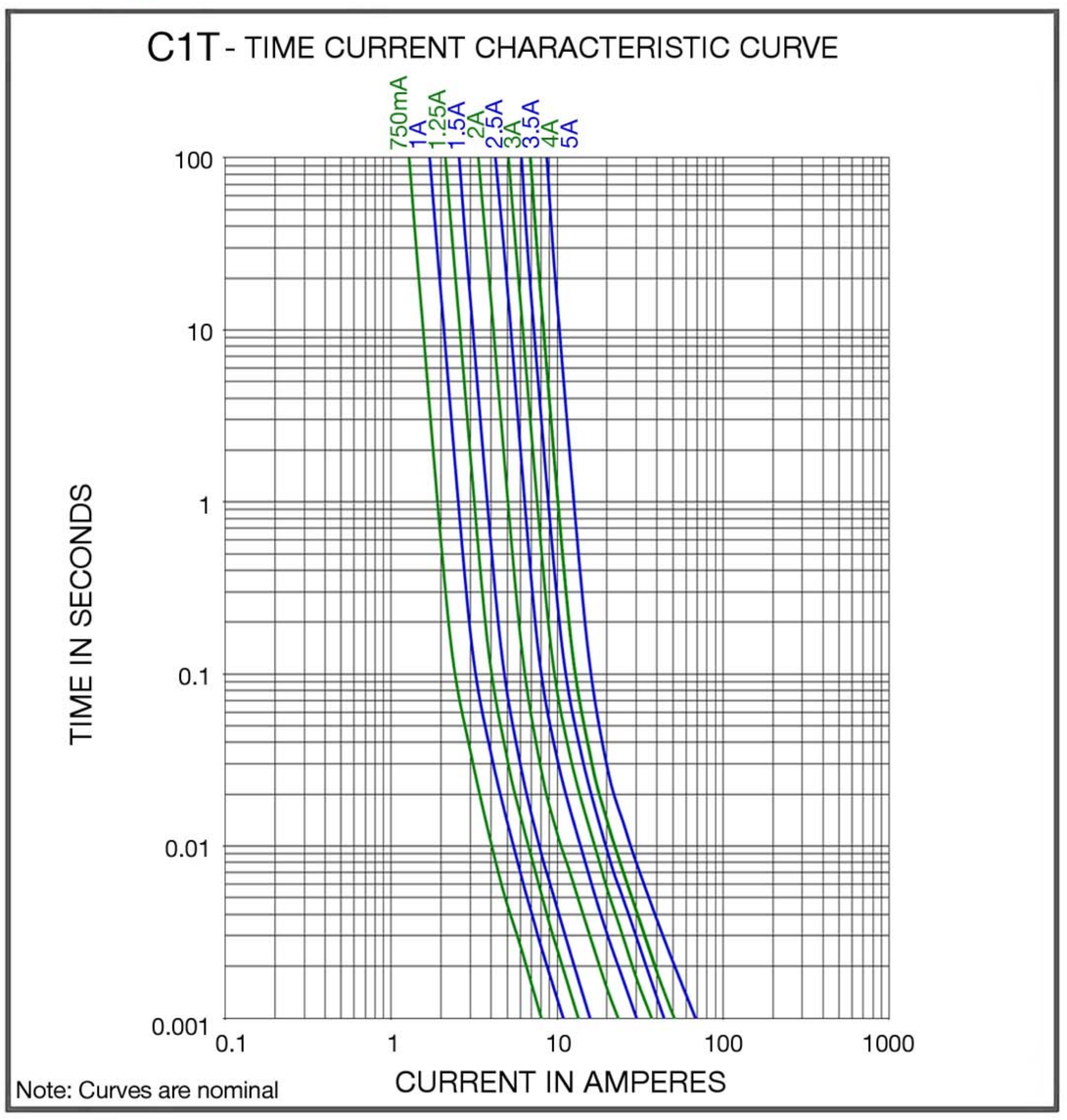
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Temperature Derating Curve



Average Time Current Curve



Electrical Specifications

Part Number	Ampere Rating (A)	Marking Code	Nominal Cold Resistance (ohms)	Maximum Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Nominal Melting I^2T @10 In (A^2 Sec)	Maximum Power Dissipation @100% In (W)	Agency Approvals
								c UL us
0685T0750-01	750mA	TM	0.845	0.795	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.06	0.60	Y
0685T1000-01	1A	T1	0.494	0.597		0.12	0.60	Y
0685T1250-01	1.25A	TP	0.305	0.541		0.20	0.68	Y
0685T1500-01	1.5A	TR	0.205	0.436		0.23	0.65	Y
0685T2000-01	2A	T2	0.123	0.325		0.63	0.65	Y
0685T2500-01	2.5A	TT	0.072	0.274		1.07	0.69	Y
0685T3000-01	3A	T3	0.054	0.232		1.64	0.70	Y
0685T3500-01	3.5A	TZ	0.042	0.194		2.28	0.68	Y
0685T4000-01	4A	T4	0.030	0.195		2.56	0.78	Y
0685T5000-01	5A	T5	0.021	0.157		5.3	0.79	Y

Consult manufacturer for other ratings

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NOTES: Test Conditions

All test for ratings 750mA - 5A were conducted with fuse samples soldered on a PCB (1.6mm thick) test board with copper traces measuring 0.035 mm (35 um) nominal thickness (1 oz.clad), 5mm wide and 100 mm overall length.

Device designed to be mounted with marking facing up.

Device designed to carry rated current for 4 hours minimum. It is recommended that device be operated continuously at no more than 80% of rated current when in a +25°C ambient, with further derating at elevated ambient temperatures.

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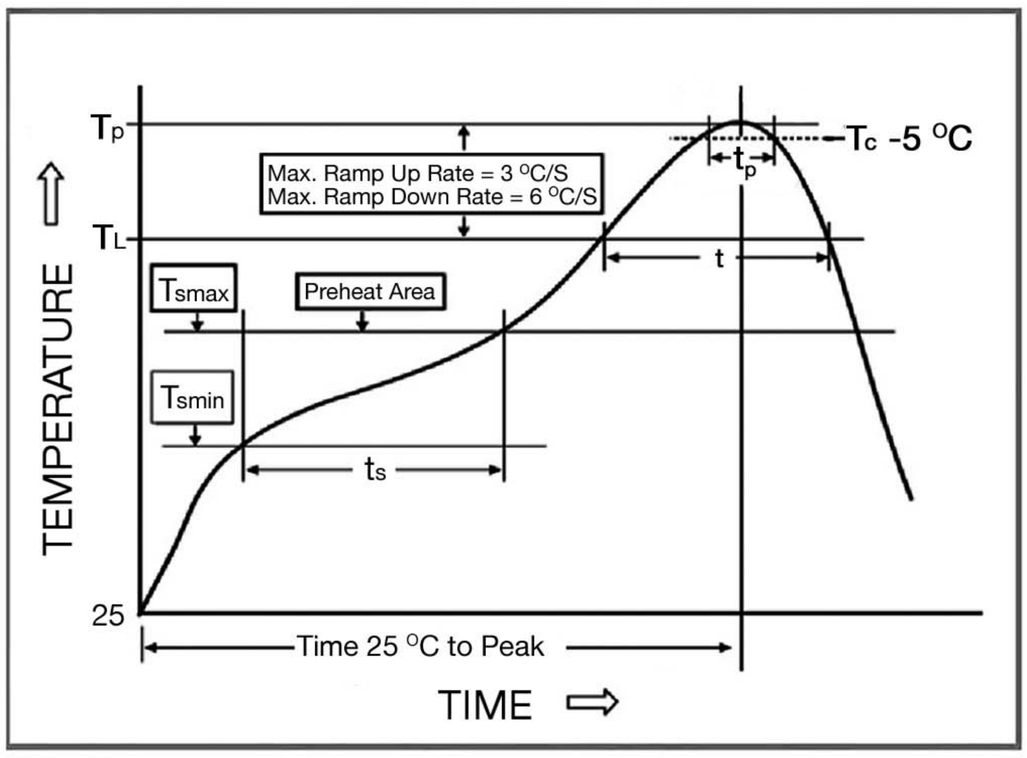
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Environmental Specifications

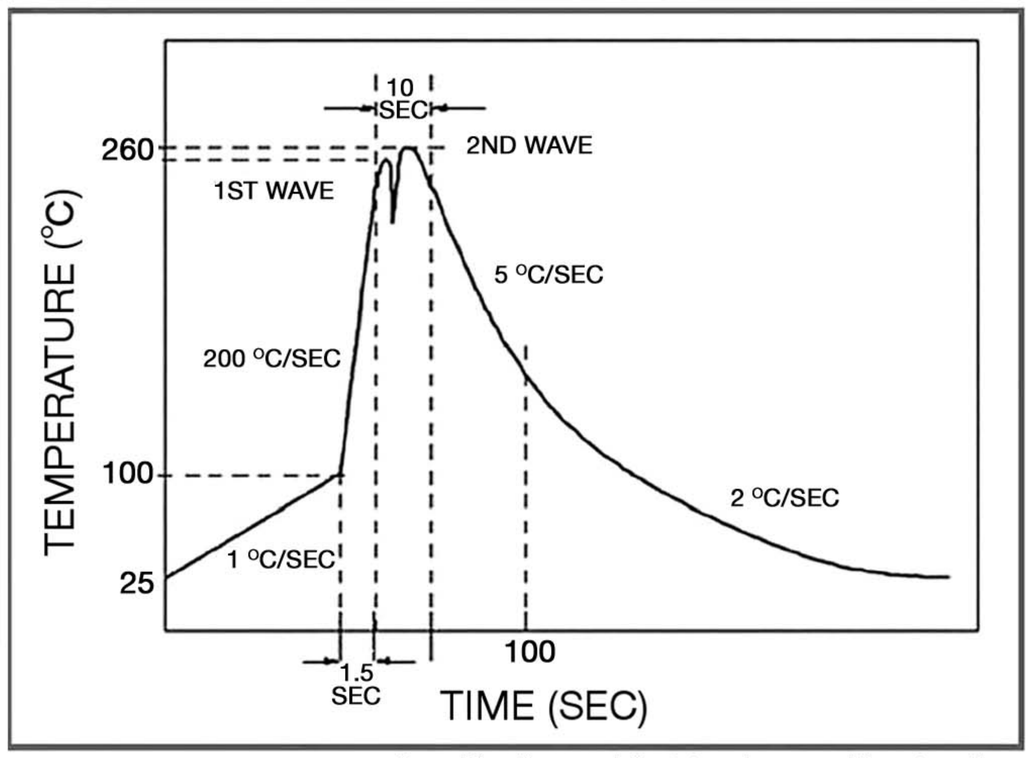
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A(10-55 Hz,0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B(48 hrs).
Insulation Resistance	MIL-STD-202G, Method 302, Test Condition A (After Opening) 10,000 ohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G, Method 210F, Test Condition C. Top Side(260 °C, 20 sec) MIL-STD-202G, Method 210F, Test Condition D.Bottom Side(260 °C,10 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65 °C to +125 °C).
Operating Temperature	-55 °C to +125 °C
Moisture Sensitivity Level	1 (According to IPC J-Std-020)

Soldering Parameters

IR Reflow Profile (IPC/JEDEC J-STD-020D)	
Preheat & Soak Temperature min (T_{smin}) Temperature max (T_{smax}) Time (T_{smin} to T_{smax}) (t_s)	 150 °C 200 °C 60 -120 seconds
Average ramp-up rate (T_{smax} to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time at liquidous (t_L)	217 °C 60 - 150 seconds
Peak temperature (T_p)	260 °C max
Time (tp) within 5 °C of the specified classification temperture (T_c)	30 seconds
Average ramp-down rate (T_p to T_{smax})	6 °C/second max.
Time 25 °C to peak temperature	8 minutes max.



Lead-free Wave Soldering Profile	
Wave Soldering Parameter	
Average ramp-up rate	200 °C / second
Heating rate during preheat	typical 1 - 2 °C / second Max 4 °C / second
Final preheat temperature	within 125 °C of soldering temperature
Peak temperature Tp	260 °C
Time within +0 °C / -5 °C of actual peak temperature	10 seconds
Ramp-down rate	5 °C / second max.



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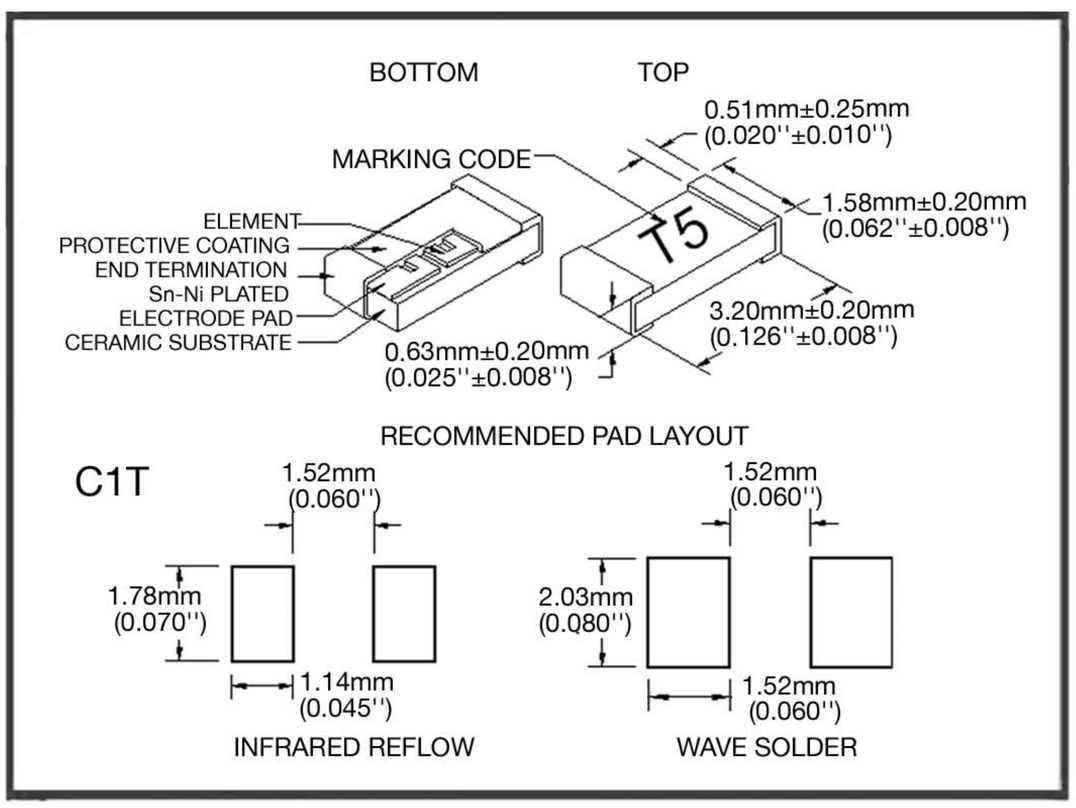
RoHS 6 Compliant

Fuse FGNO Explanation
06XX X [XXXX] X XX, [XXXX]=Ampere Rating

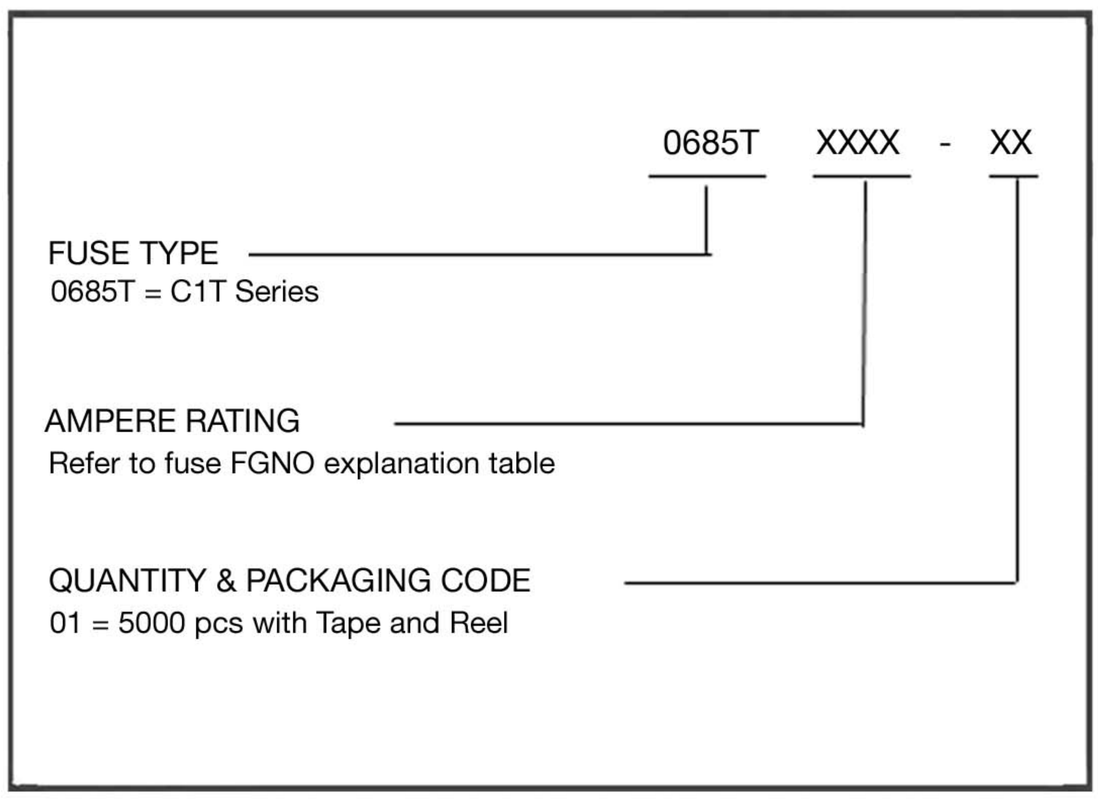
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/32	0.032	32	0032
1/25	.040	40	0040
1/20	.050	50	0050
1/16	.063	63	0063
8/100	.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
15/100	.150	150	0150
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
3/10	.300	300	0300
	.315	315	0315
3/8	.375	375	0375
4/10	.400	400	0400
1/2	.500	500	0500
6/10	.600	600	0600
	.630	630	0630
7/10	.700	700	0700
3/4	.750	750	0750
8/10	.800	800	0800

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.50	1.5	1500
	1.60	1.6	1600
	2.0	2	2000
2-1/4	2.25	2.25	2250
2-1/2	2.5	2.5	2500
	3.0	3	3000
	3.15	3.15	3150
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000
7-1/2	7.5	7.5	7500
	8.0	8	8000
		10	9100
		12	9120
		15	9150
		20	9200
		25	9250
		30	9300

Mechanical Dimensions



Ordering Information



Packaging

Packaging Tape & Reel	Packaging Specification	Quantity	Quantity & Packaging Code
8 mm wide tape with 7 inches Diameter reel	EIA Standard 481-E	5000	0685TXXXX-01

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