Type RST

Time Lag Radial Lead Micro Fuse Series

HF Pb RST Series — RoHS 6 Compliant

Description

Sub-miniature, time lag type, 250V rated fuses designed, approved and complied with IEC 60127-3, standard sheet 4.

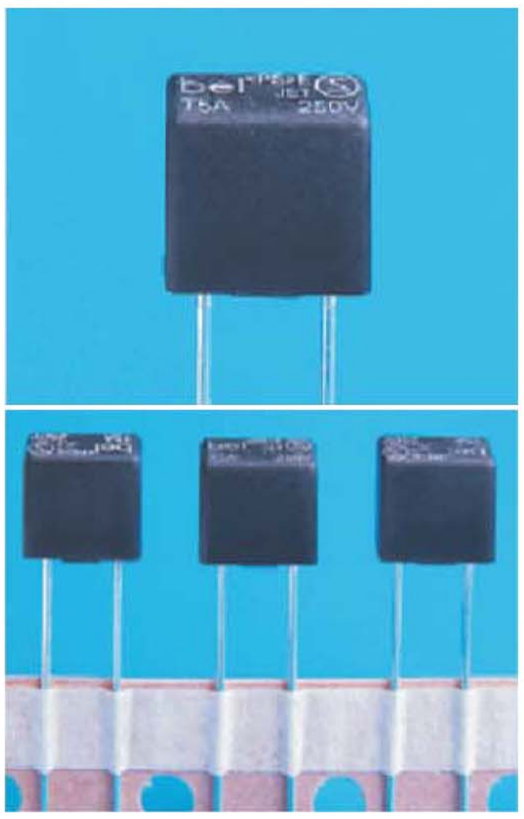
Features

- Time lag (250V AC)
- Meet IEC standard 60127-3, sheet 4
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS 6 compliant
- Halogen Free
- Leadfree

Applications

Provide individual protection for components or internal circuits.
- Power supplies
- Battery chargers
- Consumer Electronics
- Adapter
- Industrial Controllers

LEAD FREE = Pb
HALOGEN FREE = HF



Physical Specifications

Materials	Base and Cover : Black thermoplastic, UL 94-V0
	Pins : 100% Matte Tin Plated Copper
Marking	On Fuse :
	"bel", "T", "Current Rating", "250V" & " Appropriate Safety Logos"
	On Label :
	"bel", "RST", "Current Rating", "Voltage Rating", "Interrupting Rating", " Appropriate Safety Logos" and " ", " "(China RoHS compliant).

Electrical Characteristics (IEC-127-3 STANDARD SHEET 4)

Rated Current	1.5 In		2.1 In	2.75 In		4 In		10 In	
	MIN		MAX	MIN	MAX	MIN	MAX	MIN	MAX
80mA to 6.3A inclusive	1	hr.	2 min.	400 ms	10 sec	150 ms	3 sec	20 ms	150 ms

In clause 9.2, the test voltage for RST ratings from 80mA to 6.3A is 63VDC.

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	VOLTAGE RATING (V)	AMPERE RANGE / VOLT @ I.R. ABILITY*
S	1304797	80mA - 6.3A / 250V AC	80mA - 5A / 250V AC @ 35A or 10 In whichever is greater.
VDE	40011144, 40028321		80mA - 6.3A / 250V AC @ 35A or 10 In whichever is greater.
cULus	E20624		80mA - 6.3A / 277V AC @ 100A
PSE	JET 1037-31007-1001		1A - 5A / 250V AC @ 100A
CCC	2004010207111444		80mA - 5A / 250V AC @ 35A or 10 In whichever is greater.

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

Specifications subject to change without notice

bel POWER SOLUTIONS & PROTECTION
a bel group

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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 X 3 axis / no load).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B(48 hrs).
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G, Method 210F, Test Condition C. Top Side.(260 °C,20 sec)
Moisture Resistance	MIL-STD-202G, Method 202G, Method 106G
Operating Temperature	-55 °C to +125 °C

Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I^2T <10 mSec (A^2 Sec)	Melting I^2T @10 In (A^2 Sec)	Maximum Power Dissipation (W)	Agency Approvals				
								cULus		VDE		
RST 80	80mA	3.5	0.398	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.01	0.01	0.10	Y	Y	Y		Y
RST 100	100mA	2.3	0.329		0.02	0.02	0.11	Y	Y	Y		Y
RST 125	125mA	1.6	0.295		0.04	0.04	0.13	Y	Y	Y		Y
RST 160	160mA	1.1	0.252		0.07	0.06	0.15	Y	Y	Y		Y
RST 200	200mA	0.73	0.200		0.12	0.11	0.17	Y	Y	Y		Y
RST 250	250mA	0.55	0.188		0.38	0.41	0.19	Y	Y	Y		Y
RST 315	315mA	0.36	0.152		0.60	0.66	0.22	Y	Y	Y		Y
RST 400	400mA	0.25	0.129		0.9	1.0	0.25	Y	Y	Y		Y
RST 500	500mA	0.18	0.114		1.5	1.7	0.29	Y	Y	Y		Y
RST 630	630mA	0.13	0.109		2.4	2.6	0.33	Y	Y	Y		Y
RST 800	800mA	0.095	0.103		3.7	4.2	0.38	Y	Y	Y		Y
RST 1	1A	0.070	0.090		6	7	0.44	Y	Y	Y	Y	Y
RST 1.25	1.25A	0.053	0.087		9	11	0.51	Y	Y	Y	Y	Y
RST 1.6	1.6A	0.038	0.085		15	17	0.58	Y	Y	Y	Y	Y
RST 2	2A	0.029	0.084		23	27	0.67	Y	Y	Y	Y	Y
RST 2.5	2.5A	0.022	0.084		37	43	0.77	Y	Y	Y	Y	Y
RST 3.15	3.15A	0.017	0.074		58	69	0.88	Y	Y	Y	Y	Y
RST 4	4A	0.013	0.073		92	110	1.02	Y	Y	Y	Y	Y
RST 5	5A	0.010	0.073		145	175	1.17	Y	Y	Y	Y	Y
RST 6.3	6.3A	0.008	0.072		230	281	1.34	Y		Y		

Consult manufacturer for other ratings

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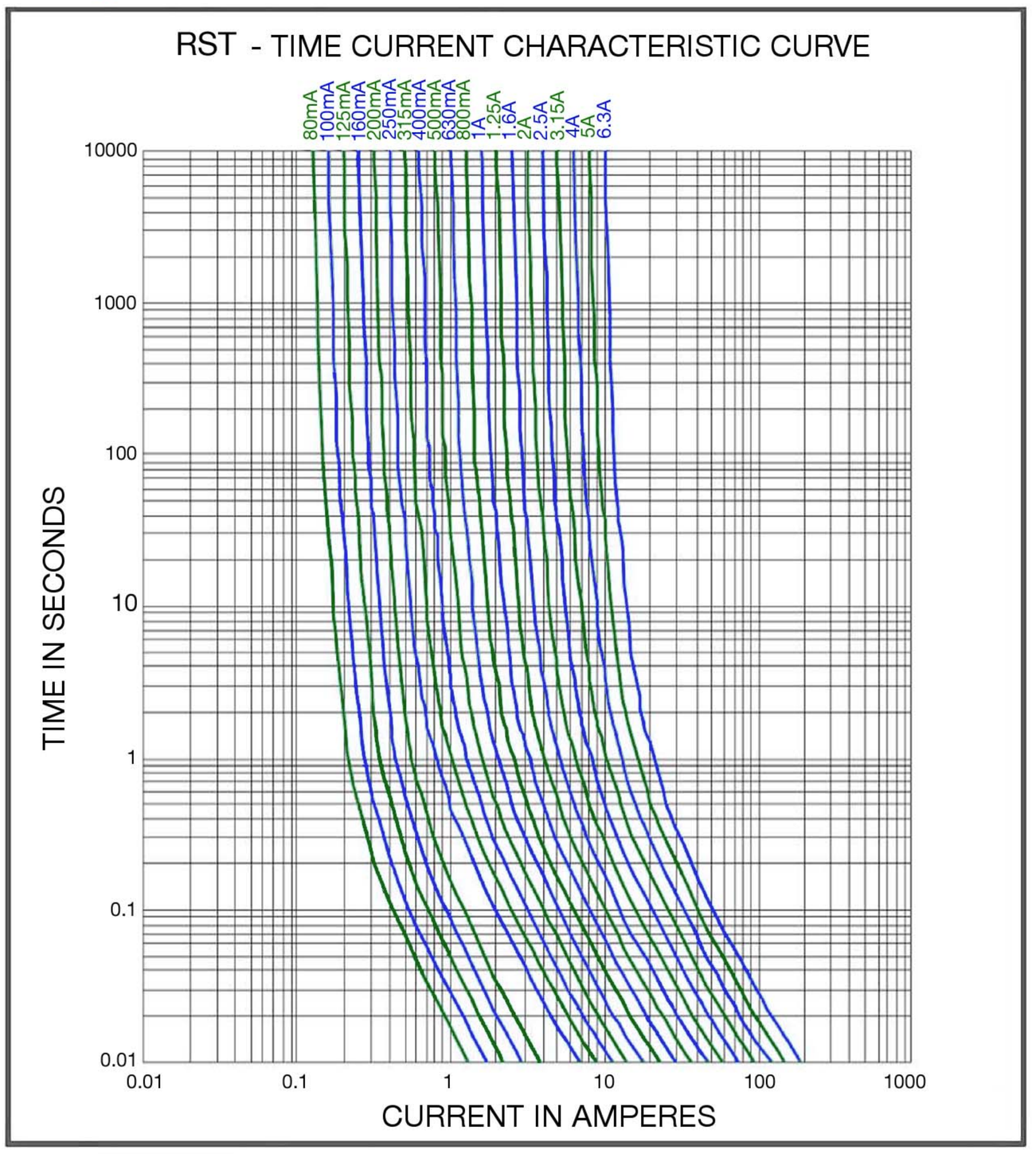
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Type RST

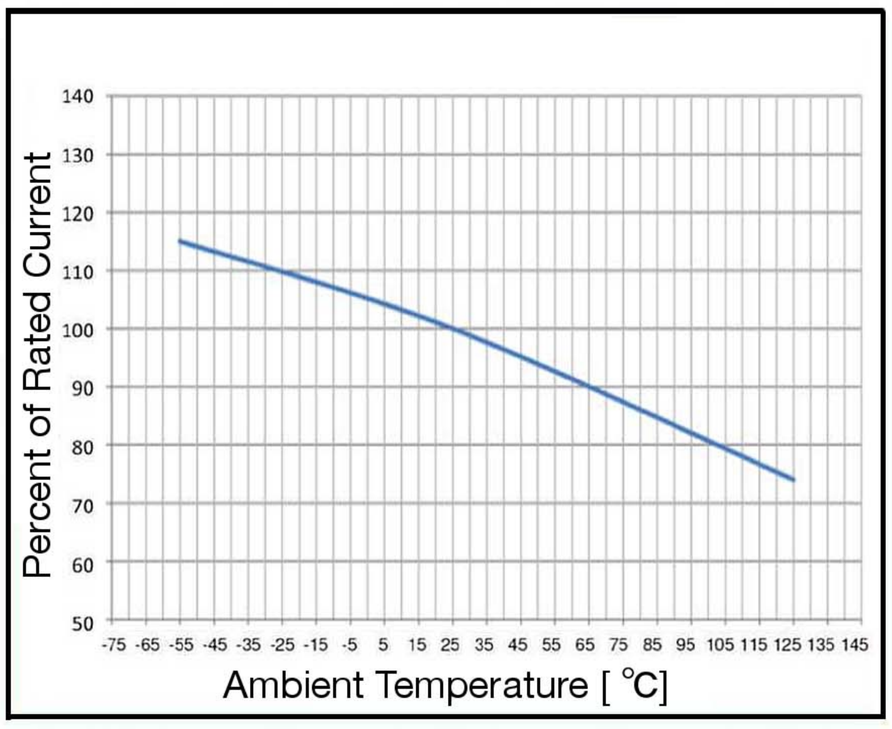
Time Lag Radial Lead Micro Fuse Series

HF Pb **RST Series** — **RoHS 6 Compliant**

Average Time Current Curve

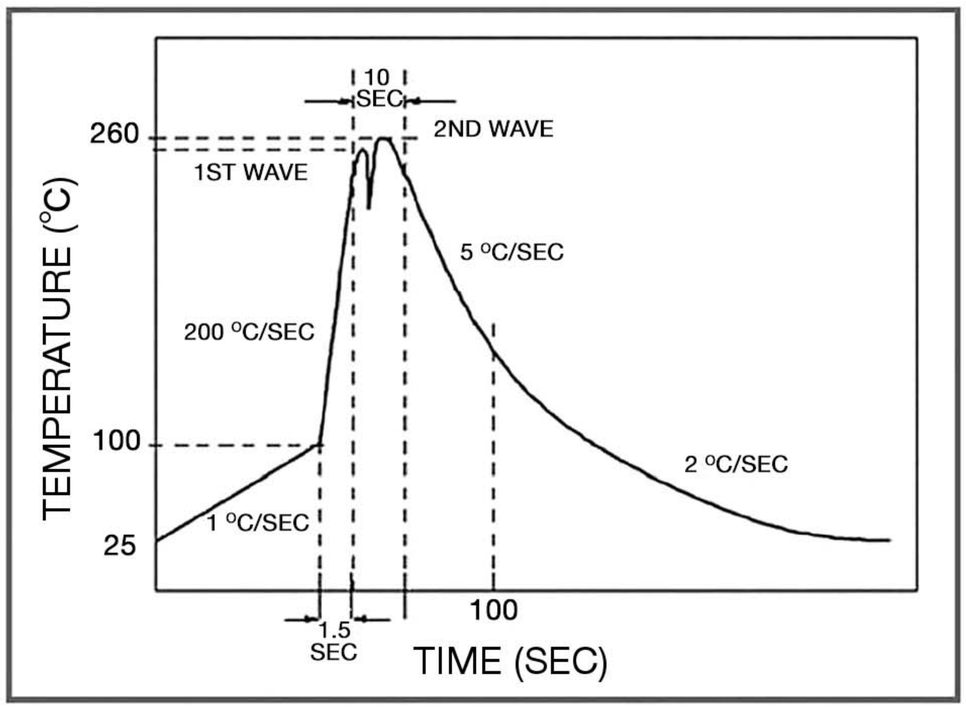


Temperature Derating Curve



Soldering Parameters

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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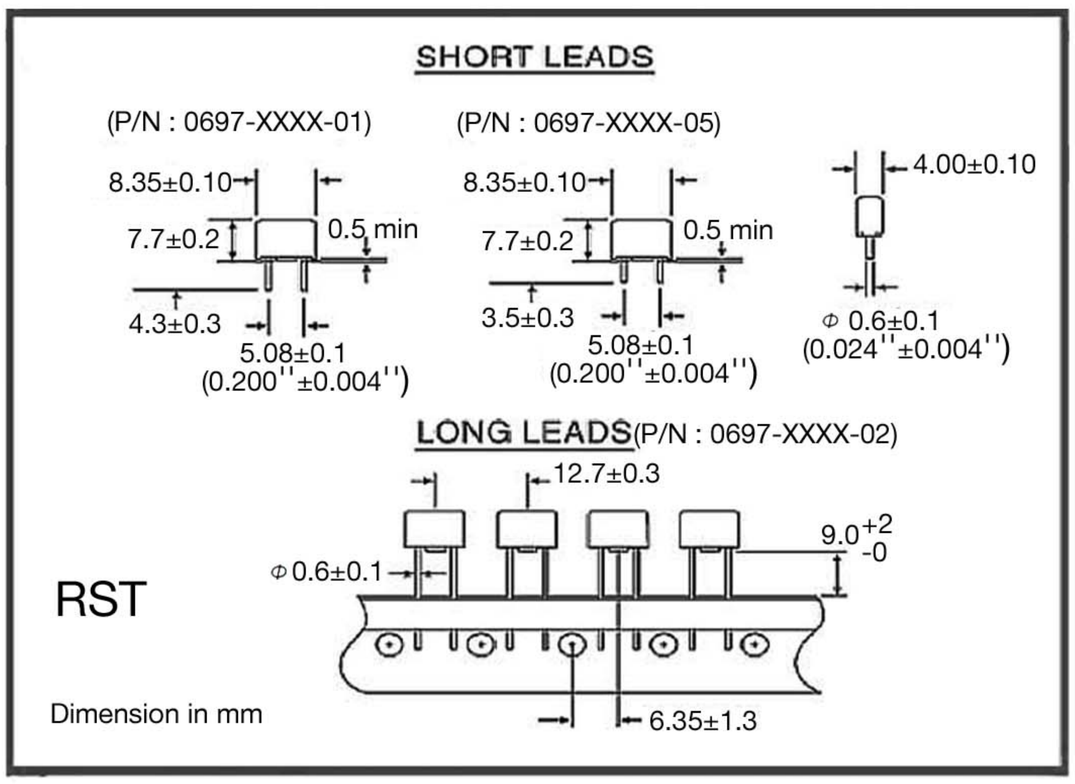
RoHS 6 Compliant

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

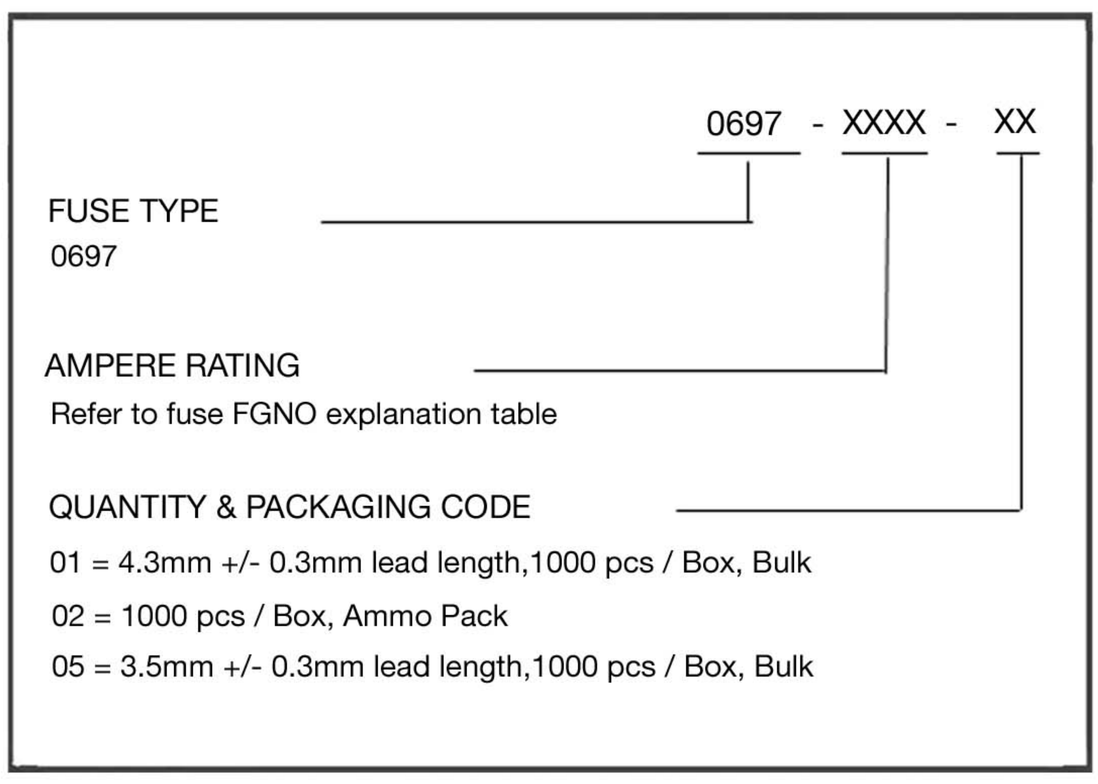
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/32	0.032	32	0032
1/25	.040	40	0040
1/20	.050	50	0050
1/16	.063	63	0063
8/100	.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
15/100	.150	150	0150
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
3/10	.300	300	0300
	.315	315	0315
3/8	.375	375	0375
4/10	.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 Option	Packaging Specification	Quantity	Packaging Code
Bulk / bag, 1000 / box	N/A	1000	01 , 05
12.7 mm pitch, On Tape / box	IEC-286-2	1000	02

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