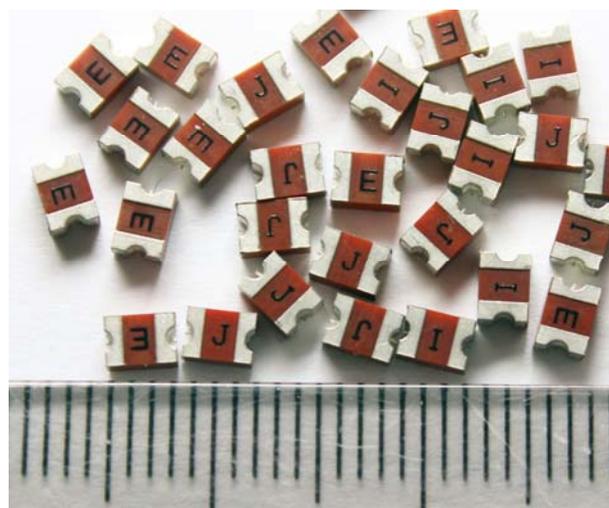


## 125V Surface Mount Fuses 1210



### Features:

- Extremely small size with 125 VAC rating
- Surface mount fuses in AC applications
- Excellent inrush current withstanding capability
- Operating temperature range: -55°C to +125 °C (with de-rating)
- Fiberglass enforced epoxy fuse body
- Copper termination with nickel and tin plating
- Halogen free, RoHS compliant
- 100% lead-free



### Agency Approval:

Recognized under the components program of UL.

File number: E232989

### Interrupting Ratings:

100 A @ 125 VAC; 100 A @ 65 VDC

### Time/Current Characteristics:

% of Current Rating	Clearing Time at 25°C	
	Min.	Max.
100%	4 hours	
250%		5 seconds

### Typical Applications:

- Lighting and Driver
- Low Voltage Power and Charger
- Appliance
- Industrial Equipment
- White Goods

### Ordering Information:

Part Number	Current Rating (A)	Marking (Black)	Voltage Rating (VAC)	Nominal DCR (Ω)	Nominal I <sup>2</sup> t (A <sup>2</sup> s)
MF1210F1.00TM	1.00	E	125	0.079	0.2
MF1210F1.50TM	1.50	G		0.050	0.5
MF1210F2.00TM	2.00	I		0.037	0.9
MF1210F2.50TM	2.50	J		0.033	1.2
MF1210F3.00TM	3.00	K		0.028	1.5

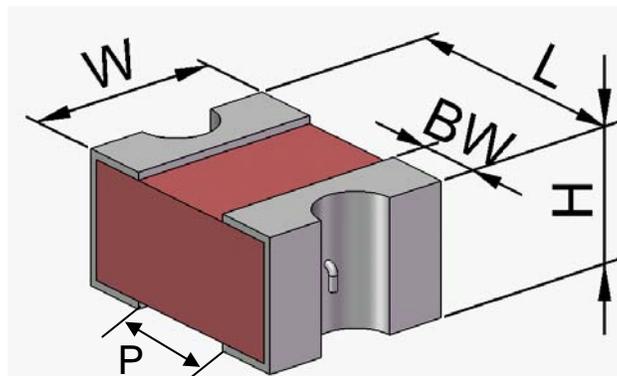
#### Notes:

- Resistance is measured at ≤10% of rated current and 25°C ambient.
- I<sup>2</sup>t is measured at 0.001s.

## 125V Surface Mount Fuses 1210

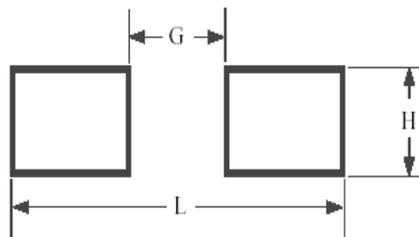
### Shape and Dimensions:

	Inch	mm
L	0.126 + 0.016/-0	3.2 + 0.4/-0
W	0.098 ± 0.008	2.5 ± 0.2
H	0.063 ± 0.008	1.6 ± 0.2
BW	0.033 ± 0.012	0.85 ± 0.3
P	≥0.063	≥1.6



### Recommended Land Pattern:

Soldering	L	G	H
	Inch (mm)	Inch (mm)	Inch (mm)
Reflow	0.17 (4.4)	0.07 (1.7)	0.11 (2.7)
Wave	0.19 (4.8)	0.08 (2.1)	0.11 (2.7)



### Product Identification:

MF 1210 F 1.00 I M

(1) (2) (3) (4) (5) (6)

(1) Series code: MF

(2) Size code: 1210

(3) Time/current characteristics: F

(4) Current rating code: 1.00 - 1 A

(5) Package code:

T - Tape & Reel

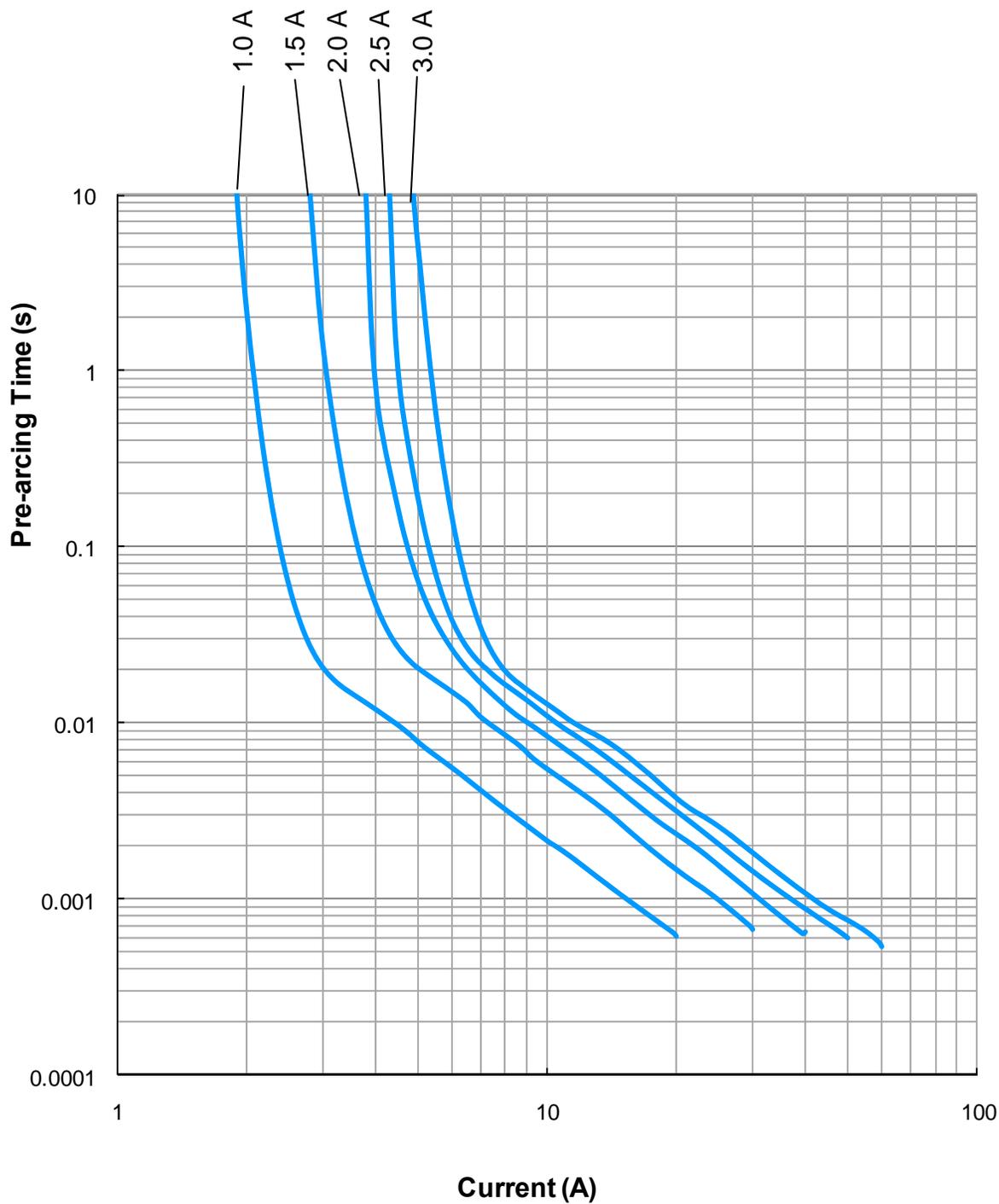
B - Bulk

(6) Marking code: M - with mark

# 125V Surface Mount Fuses 1210



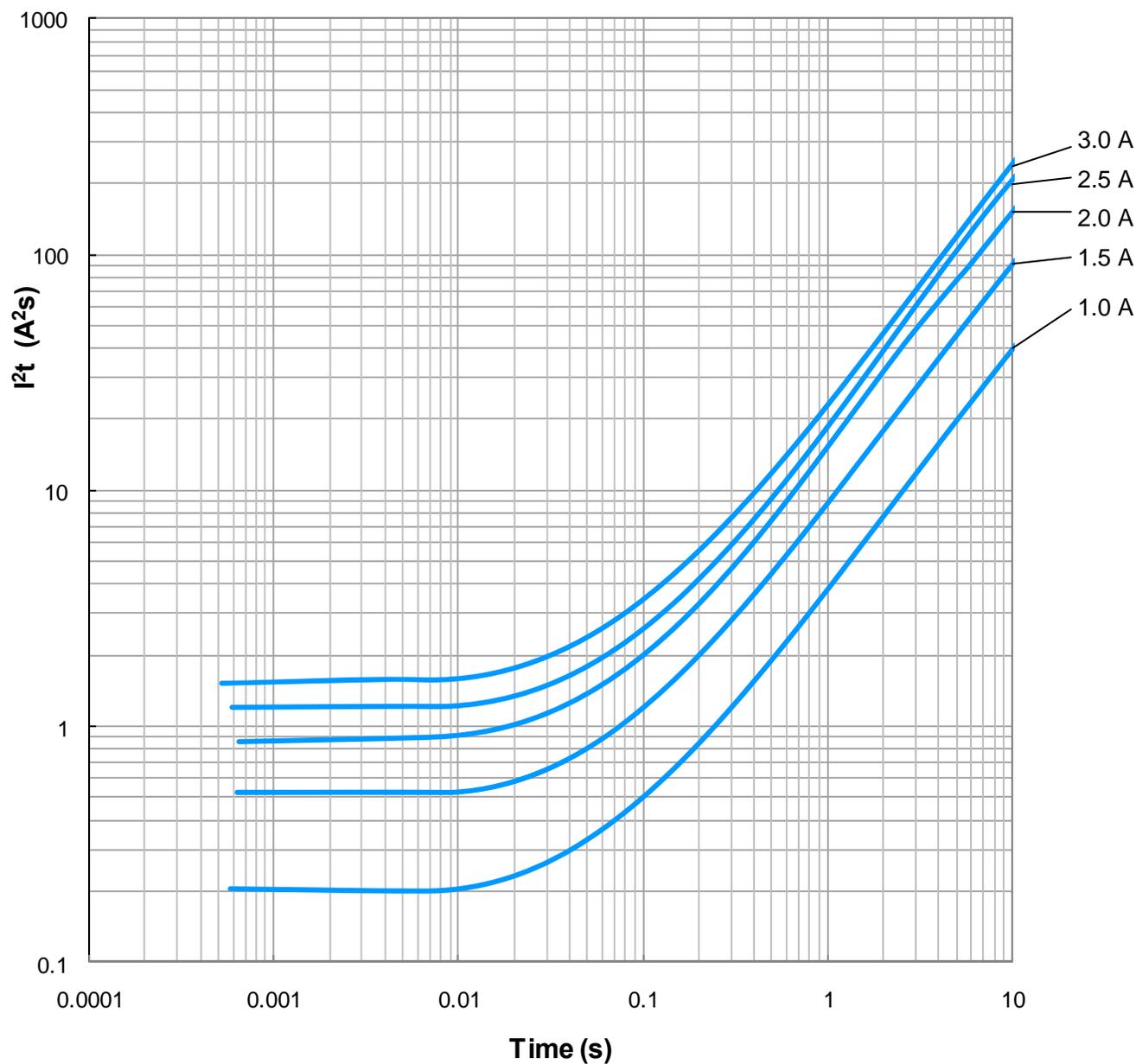
## Average Time/Current Curves



# 125V Surface Mount Fuses 1210



## Average $I^2t$ vs. $t$ Curves



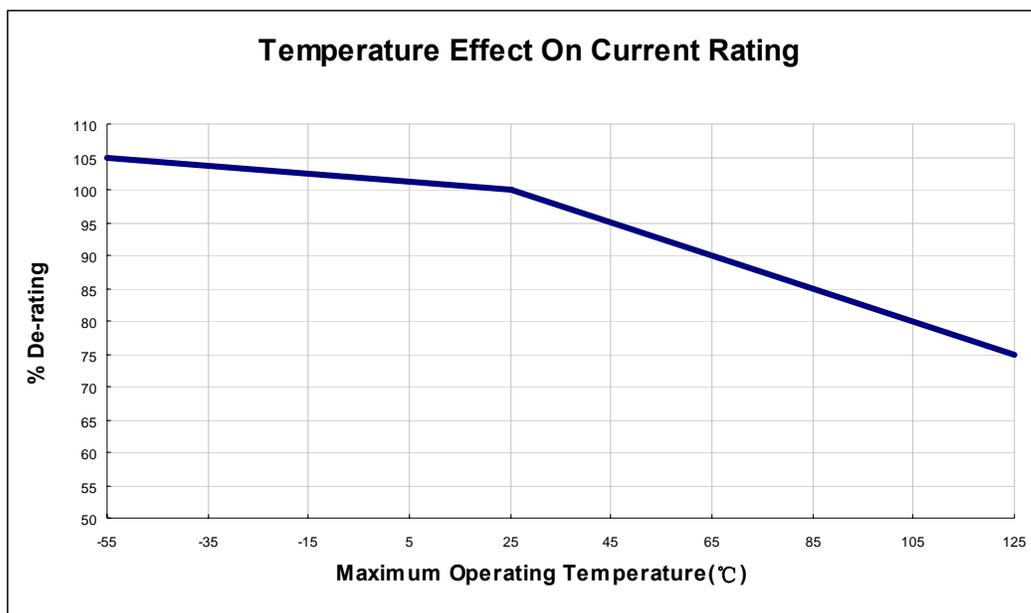
## 125V Surface Mount Fuses 1210

### Environmental Tests:

Reliability Test	Test Condition and Requirement	Test Reference
Reflow & Bend	3 reflows at 245°C followed by a 2 mm bend, 20% DCR change max. no mechanical damage	Refer to AEM QIQ 048 and QIQ 034
Solderability	245°C, 5 seconds, new solder coverage 90% minimum	MIL-STD-202 Method 208
Soldering Heat Resistance	260°C, 10 seconds, 20% DCR change max., new solder coverage 75% minimum	MIL-STD-202 Method 210
Life	25°C , 80% rated current( $\geq 1A$ ), 75% rated current ( $< 1A$ ), 2000 hours, 10% voltage drop change max.	Refer to AEM QIQ106
Thermal Shock	-65°C to +125°C, 100 cycles, 10% DCR change max., no mechanical damage	MIL-STD-202 Method 107
Mechanical Vibration	5 – 3000 Hz, 0.4 inch double amplitude or 30 G peak, 10% DCR change max., no mechanical damage	MIL-STD-202 Method 204
Mechanical Shock	1500 G, 0.5 milliseconds, half-sine shocks, 10% DCR change max., no mechanical damage	MIL-STD-202 Method 213
Salt Spray	5% salt solution, 48 hour exposure, 10% DCR change max., no excessive corrosion	MIL-STD-202 Method 101
Moisture Resistance	10 cycles, 10% DCR change max., no excessive corrosion	MIL-STD-202 Method 106

### Fuse Selection and Temperature De-rating Guideline

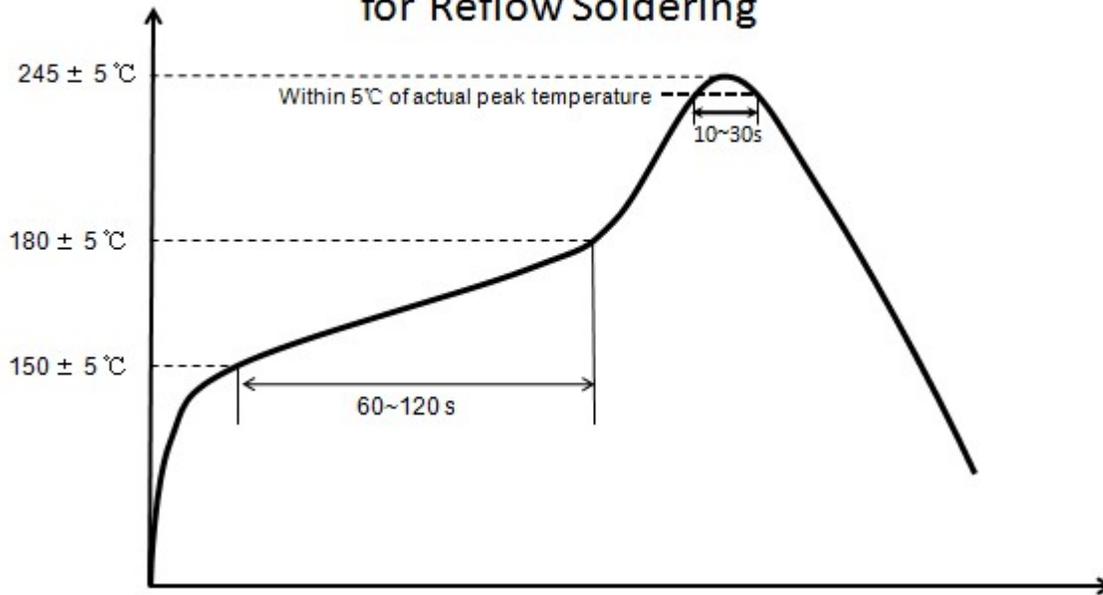
The ambient temperature affects the current carrying capacity of fuses. When a fuse is operating at a temperature higher than 25°C, the fuse shall be “de-rated”.



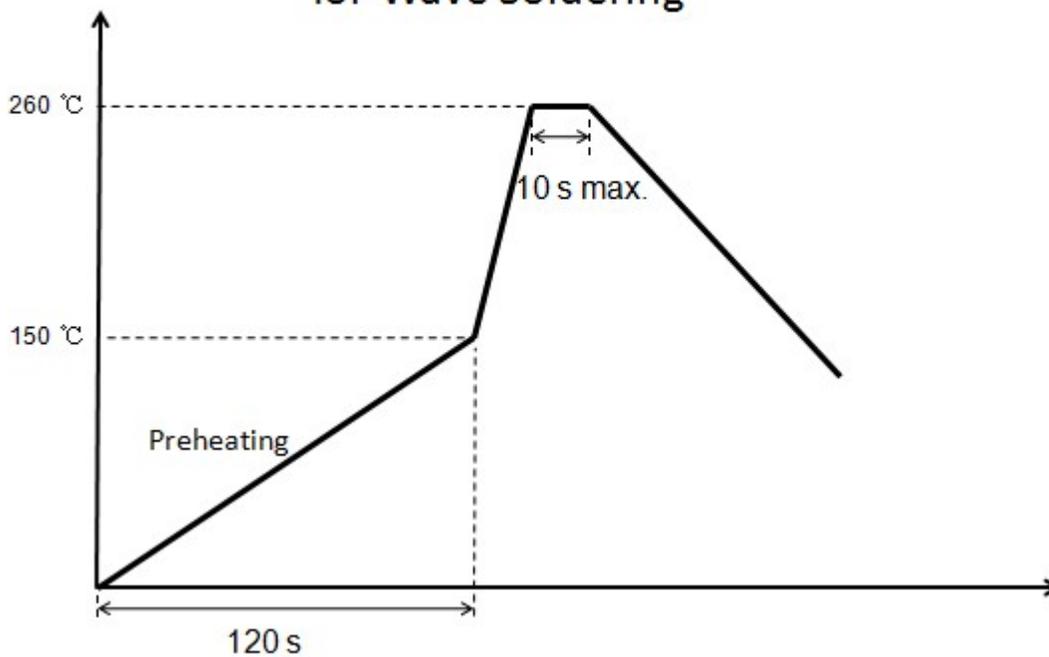
# 125V Surface Mount Fuses 1210

## Soldering Temperature profiles

### Recommended Temperature Profile for Reflow Soldering



### Recommended Temperature Profile for Wave Soldering



## 125V Surface Mount Fuses 1210

### *Packaging Data*

Chip Size	Parts on 7 inch (178 mm) Reel
1210 (3225)	2,500

### *Storage*

The maximum ambient temperature shall not exceed 35°C . Storage temperatures higher than 35°C could result in the deformation of packaging materials.

The maximum relative humidity recommended for storage is 75%. High humidity with high temperature can accelerate the oxidation of the solder plating on the termination and reduce the solderability of the components.

Sealed vacuum foil bags with desiccant should only be opened prior to use.

The products should not be stored in areas where harmful gases containing sulfur or chlorine are present.

Specifications and descriptions in this literature are as accurate as known at the time of printing, but are subject to change without notice. For the most updated information, please consult the factory.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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