

URC/URD

SEMICONDUCTOR PROTECTION FUSES



PROTISTOR® FUSES

690V AC

URC/URD from 6 up to 100A

SIZES: 14 X 51 & 22 X 58

Features/Benefits

- **Extremely high Interrupting rating Fuses:**
Protection of power Semiconductors according to IEC 269.1 and 4
- **690V AC Voltage Rating**
- **aR Class** according to VDE 636-23 and IEC 269.4
- **Two Models** according to NF C 63210 and 63211 with and without blown fuse built-in trip-indicator for sizes 14 x 51 and 22 x 58
- **UL RECOGNIZED** (Except 6A)*



APPLICATIONS DATA

Voltage rating U_N (VAC)	Size	Class	Current rating I_N (A)	Melting $I_{t1}^2 @ 1 \text{ ms}$ I_p^2 (A ² s)	Total clearing $I_{t1}^2 @$ (A ² s) 660 V		Watt losses		Tested interrupting rating
					$0.8 I_N$	I_N	$0.8 I_N$	I_N	
690 V	14 x 51	URC	6	1.3	17.5*		1.1	2	100 kA @ 690 V
			8	2.4	27.5		1.6	2.8	
			10	4.3	40		2	3.5	
			12	5.4	60		2.45	4.4	
			16	13.2	100		2.7	4.8	
			20	27	160		2.9	5.2	
			25	53	275		3.2	5.8	
			32	98	500		3.9	7	
			40 (1)	130	700		6	10.7	
			50 (1)	280	1500		6.3	11.6	
	22 x 58	URD	40 (2)	130	$7 I_N < I_p < 30 I_N$	850	6	10.7	100 kA @ 690 V
			50 (2)	280	$I_p \geq 30 I_N$	700	6.3	11.6	
URD		25	22	125		5.2	10	100 kA @ 690 V	
		32	49	275		5.7	11		
		40	88	480		6.8	13		
		50	155	800		7.8	14.9		
63	350	1850		8.4	16				
80	730	3800		9.4	17.8				
100	1560	8000		10	19				

* Without trip-indicator I_{t1}^2 : 15 A²s.
 (1) No trip-indicator available for this model.
 (2) Models available only with trip-indicator.
 Minimum operating voltage for built-in trip-indicator: 20 V.

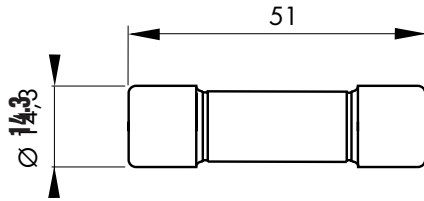
URC/URD

SEMICONDUCTOR PROTECTION FUSES

PART NUMBERS

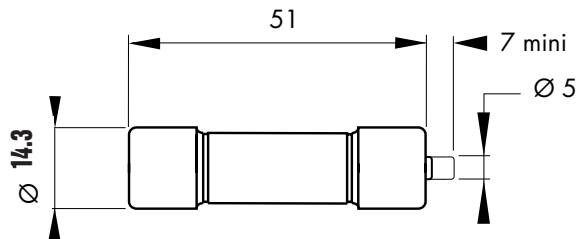
All the fuses presented on this page are (except 6 A)*

14x51 - Without blown fuse indication



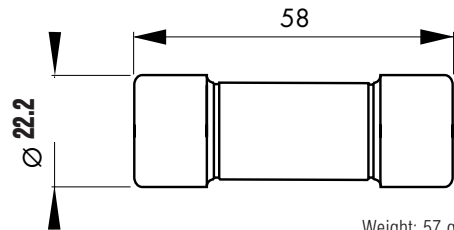
Weight : 18g
Packaging : 10 pieces

14x51 - With blown fuse trip-indicator



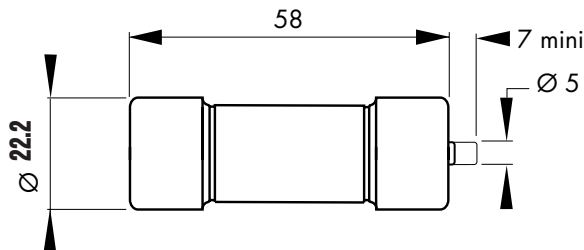
Weight : 18g
Packaging : 10 pieces

22x58 - Without blown fuse indication



Weight: 57 g
Packaging: 10 pieces

22x58 - With blown fuse trip-indicator



Weight: 57 g
Packaging: 10 pieces

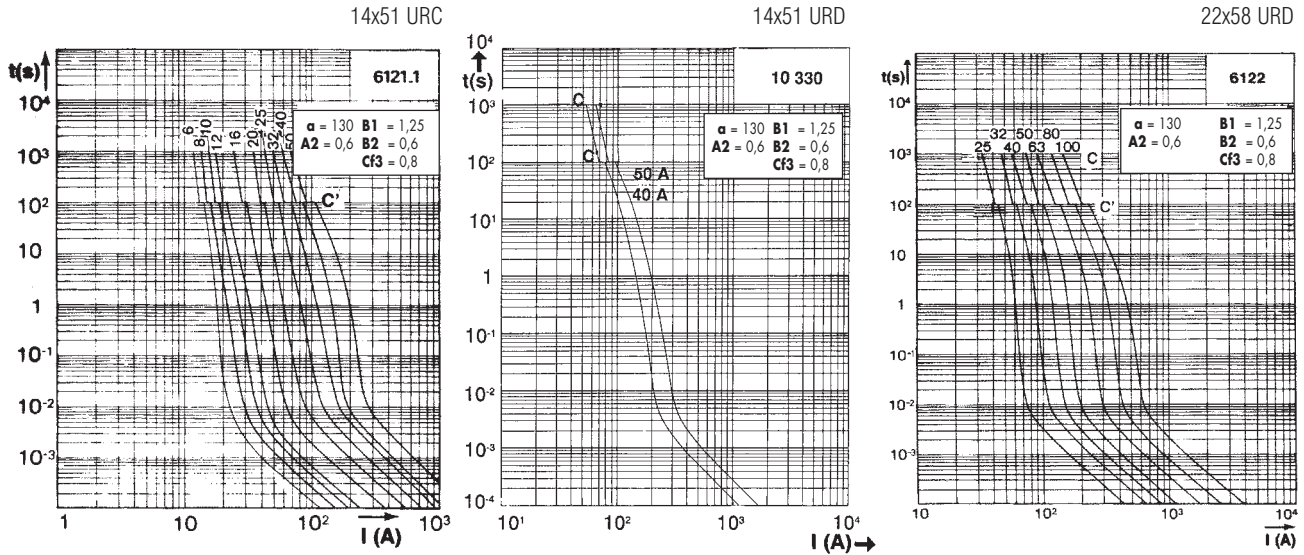
CURRENT RATING	CATALOG NO.	REF #
6 A	6.900 CP URC 14.51/6*	K081475
8 A	6.900 CP URC 14.51/8	S093902
10 A	6.900 CP URC 14.51/10	T093903
12 A	6.900 CP URC 14.51/12	V093904
16 A	6.900 CP URC 14.51/16	W093905
20 A	6.900 CP URC 14.51/20	X093906
25 A	6.900 CP URC 14.51/25	Y093907
32 A	6.900 CP URC 14.51/32	Z093908
40 A	6.900 CP URC 14.51/40	A093909
50 A	6.900 CP URC 14.51/50	B093910

CURRENT RATING	CATALOG NO.	REF #
6 A	6.921 CP URC 14.51/6*	G081518
8 A	6.921 CP URC 14.51/8	C093911
10 A	6.921 CP URC 14.51/10	D093912
12 A	6.921 CP URC 14.51/12	E093913
16 A	6.921 CP URC 14.51/16	F093914
20 A	6.921 CP URC 14.51/20	G093915
25 A	6.921 CP URC 14.51/25	H093916
32 A	6.921 CP URC 14.51/32	J093917
40 A	6.921 CP URD 14.51/40	T100136
50 A	6.921 CP URD 14.51/50	V100137

CURRENT RATING	CATALOG NO.	REF #
25 A	6.900 CP URD 22x58/25	B093956
32 A	6.900 CP URD 22x58/32	Z094828
40 A	6.900 CP URD 22x58/40	S094822
50 A	6.900 CP URD 22x58/50	W094779
63 A	6.900 CP URD 22x58/63	T094823
80 A	6.900 CP URD 22x58/80	A094829
100 A	6.900 CP URD 22x58/100	Y094827

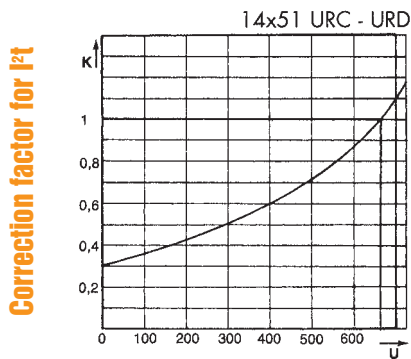
CURRENT RATING	CATALOG NO.	REF #
25 A	6.921 CP URD 22x58/ 25	H093801
32 A	6.921 CP URD 22x58/ 32	C093957
40 A	6.921 CP URD 22x58/ 40	J093802
50 A	6.921 CP URD 22x58/ 50	D093958
63 A	6.921 CP URD 22x58/ 63	K093803
80 A	6.921 CP URD 22x58/ 80	E093959
100 A	6.921 CP URD 22x58/100	F093960

Melting Time-Current Data

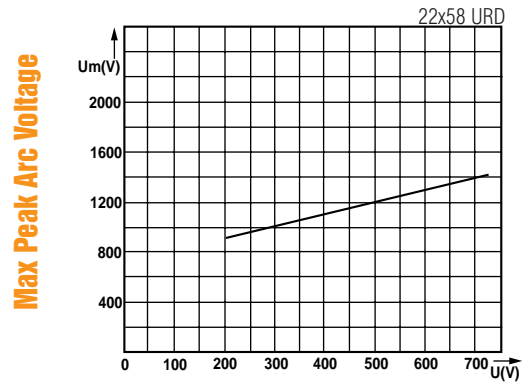
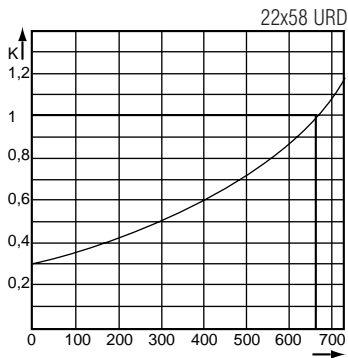
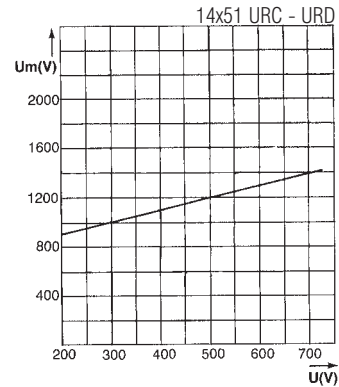


These curves indicate, for each rated current, the pre-arcing (melting) time vs. the R.M.S. current.

Clearing I²t vs. Operating Voltage



Peak arc voltage vs. Operating Voltage



Operating Voltage

Operating Voltage

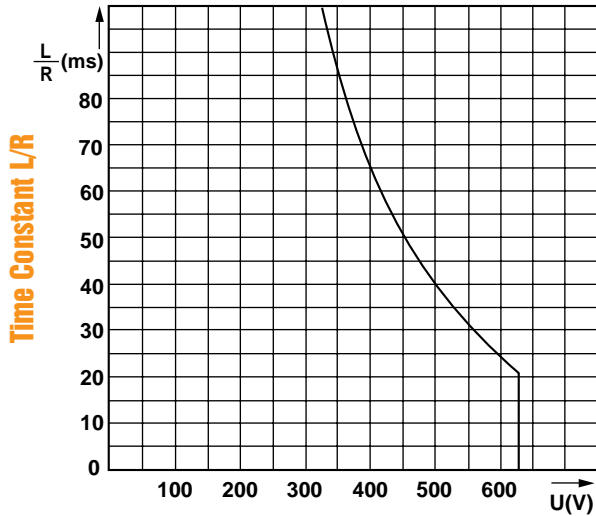


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DC Voltage Capabilities vs. Time Constant

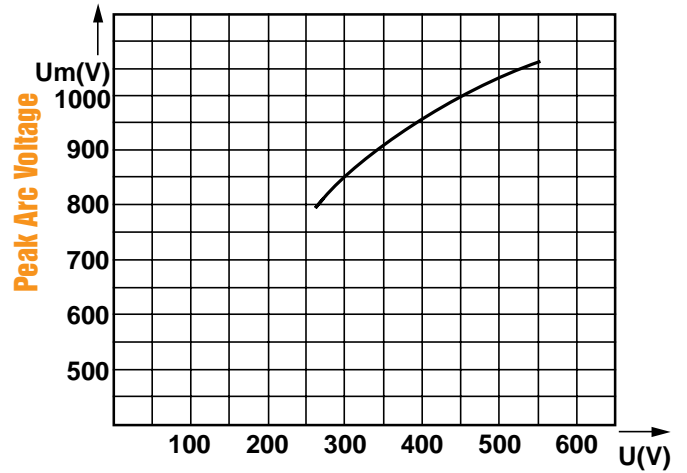
14x51 URC - URD



DC Voltage Capability

Peak Arc voltage vs. DC circuit voltage

14x51 URC - URD

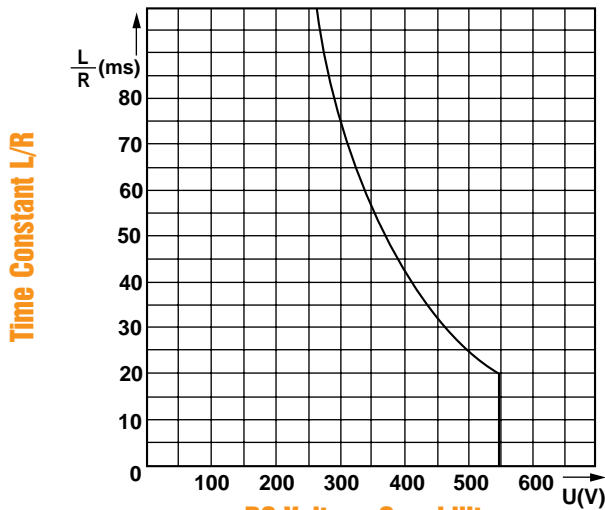


DC Circuit Voltage

See melting-time current data for minimum breaking current.

DC Voltage Capabilities vs. Time Constant

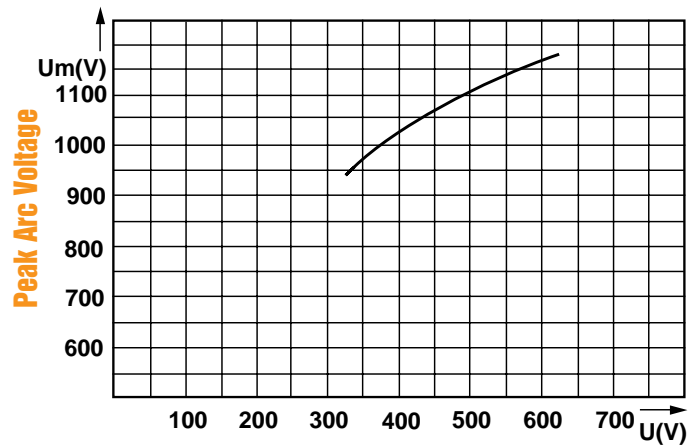
22x58 URD



DC Voltage Capability

Peak Arc voltage vs. DC circuit voltage

22x58 URD



DC Circuit Voltage

These curves provide the DC voltage capability of the fuse as a function of circuit time constant. (L/R ratio)

These curves shows the peak value U_m of the arc voltage which appears across the fuse link as a function of the operating voltage U .