

## Specifications 技术参数

Dc Power Fuses  
North American Style

### Ratings & Features Applications 电气参数/功能应用领域:

- ◇ Volts电压: 1000Vdc
- ◇ Amps电流: 30-800A
- ◇ Interrupting Capacity 分断  
Max Ic: 50kA 1000Vdc  
Class of Operation: aR  
Design For DC Applications 直流应用设计;  
Excellent Dc Performance 卓越的直流分断能力;  
Low arc voltage and low energy let-through(I2t) 焦耳积分放通量小;  
Superior cycling capability 可循环利用率高  
Low Watt Losses 低功率损耗;  
Electrical Energy Storage 电能/储能;  
Disconnect or Maintenance Safety Disconnect 隔离开关、维护开关  
EV/HEV 可用于纯电动汽车和混合动力汽车  
Battery Pack Protection 动力电池包保护;  
Backup Protection For Dc Relay 直流继电器保护;



### Standards / Approvals 认证/标准:

- ◇ Refer To UL248.13/IEC60269.6/GB31465.6/JASO-D622/ISO8820.8  
性能参考UL248.13/IEC60269.6/GB31465.6/JASO-D622/ISO8820.8
- ◇ Manufactured Under a IATF16949 Quality System for Compliance with Automotive Requirements  
根据IATF16949质量体系制造符合汽车要求
- ◇ Reach Declaration Available Upon Request  
可根据要求提供REACH声明
- ◇ CE
- ◇ RoHS Compliant  
符合RoHS

### Features & benefits 产品特性:

Higher voltage rating provides overall system efficiency using smaller, more economical conductors while meeting the needs of higher voltage. Up to ten times faster opening under high fault current conditions helps assure reliable protection of circuits and components. Can be applied in parallel to realize greater ampacity within sizing guidelines, Excellent power of resisting voltaic impingement and environment temperature tolerance, Excellent resistance to mechanical vibration and impact resistance.

满足高电压、小体积、更经济的提升整体系统效率，同时满足更高电压的需求。在大的故障电流条件下，断开速度更快，确保电路和部件的可靠保护。可以并行应用，实现尺寸范围内更大的载流量。良好的抗电流冲击能力以及冷、热环境温度耐受能力，具有优越的抗机械振动与冲击能力。

### Product Model 产品型号说明:

<b>HC</b>	<b>HV</b>	<b>F</b>	<b>1000</b>	:	<b>600</b>	<b>A</b>	:	<b>51R</b>
<b>HC:</b> Company Code								
<b>EV:</b> Electric Vehicle								
<b>HV:</b> High Speed								
<b>F:</b> Fiberglass	<b>T:</b> Ceramics							
<b>Rated Voltage:</b> 1000: 1000V								
<b>Rated Current:</b> 600: 600A								
<b>x:</b> Connect: A, H, T								
<b>Type Series Code:</b> 26R, 38R, 51R, 63R*								

#### Fuse Ratings 额定参数

Rated Current			Catalog no.	Energy Integrals I <sup>2</sup> t		Watts Loss	Breaking Capacity
				Melting A <sup>2</sup> S	Clearing A <sup>2</sup> S	1.0In Max	
26 mm diameter case	30	30A	HCHVF1000-30A-26R	157.5	1600	6.5	50kA
	35	35A	HCHVF1000-35A-26R	218.4	2060	7.2	
	40	40A	HCHVF1000-40A-26R	312	2575	8.2	
	50	50A	HCHVF1000-50A-26R	488.8	3605	10.3	
	60	60A	HCHVF1000-60A-26R	696.8	5150	11.3	
	70	70A	HCHVF1000-70A-26R	1144	7107	12.4	
	80	80A	HCHVF1000-80A-26R	1612	9991	13.4	
	90	90A	HCHVF1000-90A-26R	1976	12360	14.4	
	100	100A	HCHVF1000-100A-26R	2912	18025	15.5	
	125	125A	HCHVF1000-120A-26R	4536	35577.5	19.0	
	150	150A	HCHVF1000-150A-26R	6218	44298	30.3	

DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

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38 mm diameter case	125	125A	HCHVF1000-125A-38R	5040	37450	17.6	50kA
	150	150A	HCHVF1000-150A-38R	6615	48150	27.5	
	175	175A	HCHVF1000-175A-38R	7875	69550	33.0	
	200	200A	HCHVF1000-200A-38R	12285	85600	35.2	
	225	225A	HCHVF1000-225A-38R	14320	96780	45.0	
	250	250A	HCHVF1000-250A-38R	15624	118642	59.4	
	300	300A	HCHVF1000-300A-38R	25415	173725	66.5	
	350	350A	HCHVF1000-350A-38R	34477	243462	73.7	
	400	400A	HCHVF1000-400A-38R	43083	336630	79.4	

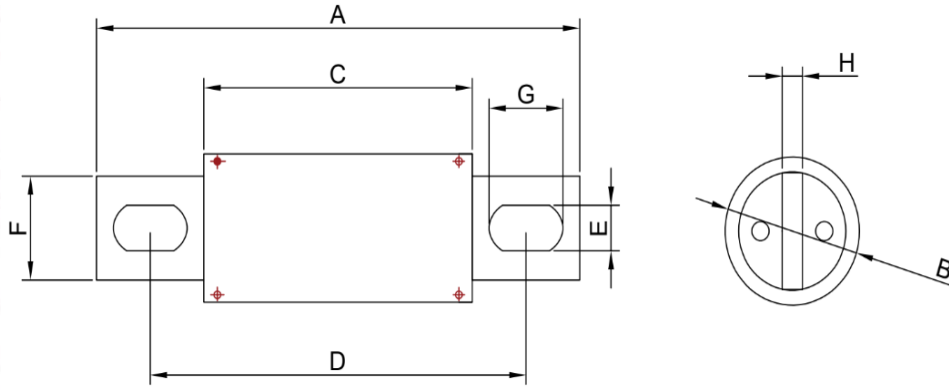
DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

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Rated Current			Catalog no.	Energy Integrals I <sup>2</sup> t		Watts Loss	Breaking Capacity
				Melting A <sup>2</sup> S	Clearing A <sup>2</sup> S	1.0In Max	
51 mm diameter case	225	225A	HCHVF1000-225A-51R	14320	96780	45.0	50kA
	250	250A	HCHVF1000-250A-51R	16800	119840	55.0	
	300	300A	HCHVF1000-300A-51R	24675	175480	61.6	
	350	350A	HCHVF1000-350A-51R	34650	247170	68.2	
	400	400A	HCHVF1000-400A-51R	45350	343500	73.5	
	450	450A	HCHVF1000-450A-51R	50460	375000	85.5	
	500	500A	HCHVF1000-500A-51R	55545	390978	104.5	
	600	600A	HCHVF1000-600A-51R	64050	556400	115.5	
	630	630A	HCHVF1000-630A-51R	71980	582400	125.0	
	700	700A	HCHVF1000-700A-51R	175350	660300	160.0	
	800	800A	HCHVF1000-800A-51R	207900	827700	185.0	

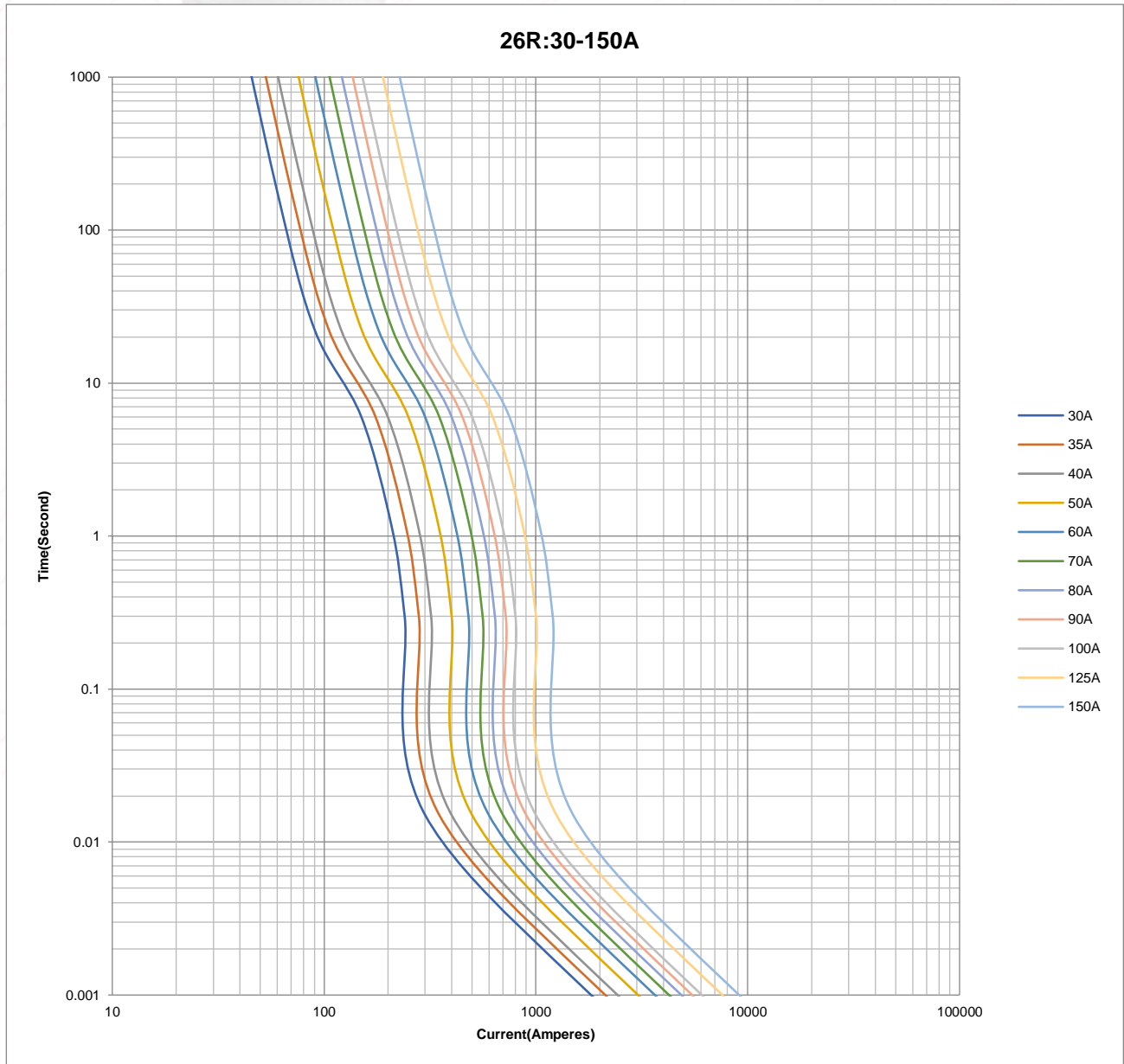
◇ DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C ;

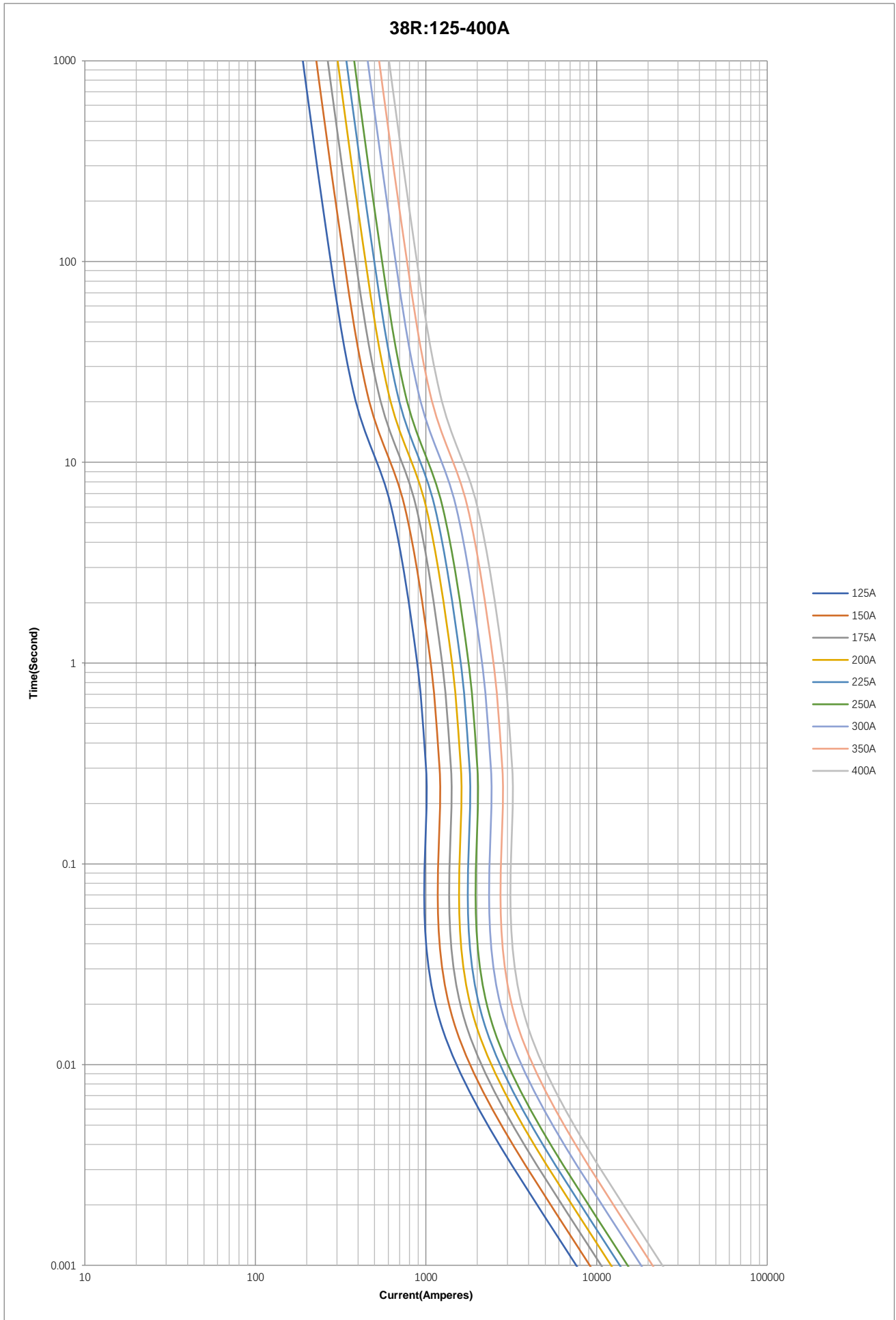
#### Dimensions (mm)尺寸

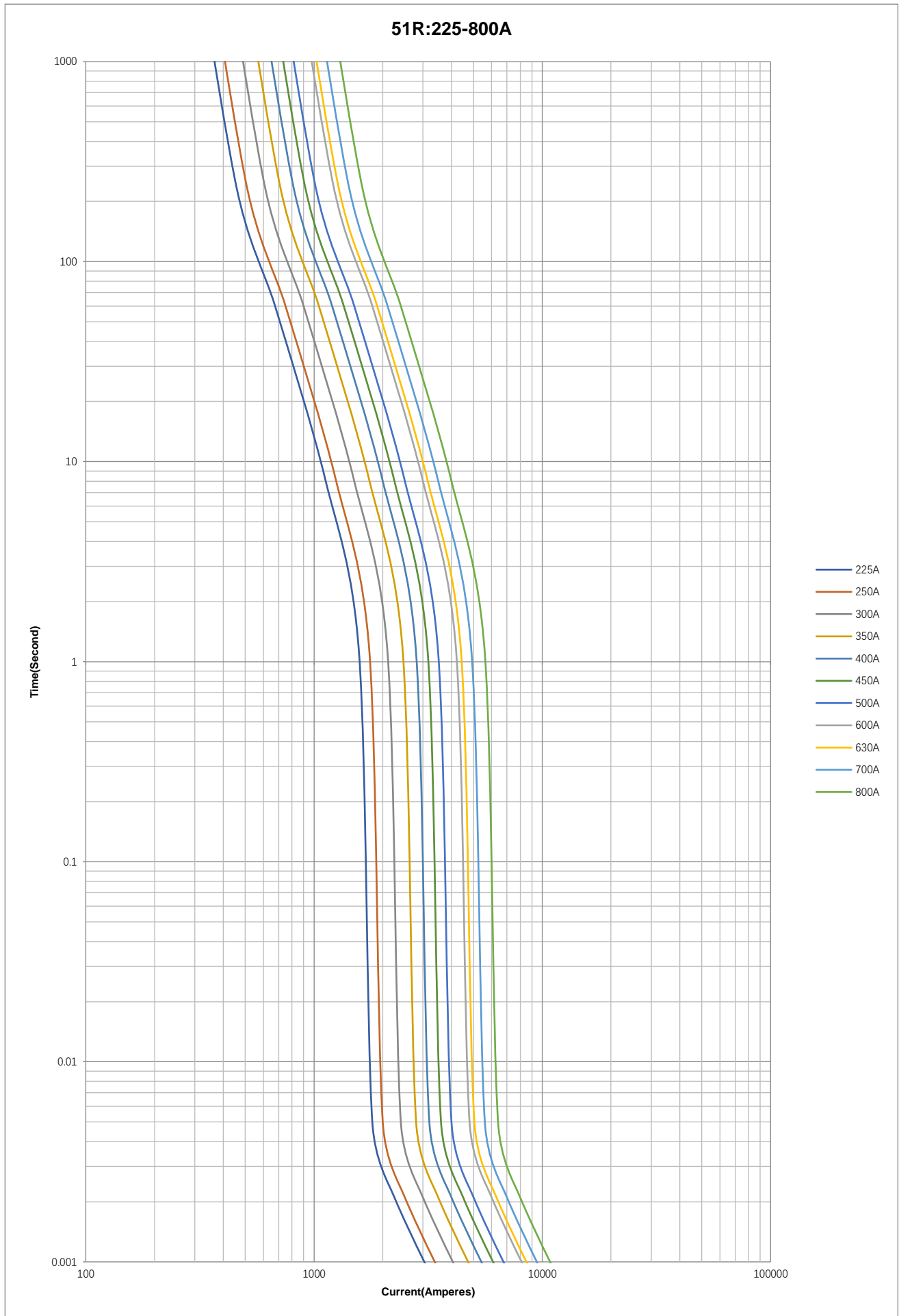


S.	Amps	A±1.5	B±1	C±1	D±1.5	E±1.5	F±0.5	H±0.5	G±0.5
26R	35-150A	127.00	26.00	79.00	103.00	8.50	20.00	3.00	13.00
38R	125-400A	142.00	38.00	85.00	113.50	10.50	25.00	6.00	20.00
51R	250-800A	145.00	51.00	88.00	116.50	10.50	40.00	6.00	20.00

#### Time-Current Curve 时间电流曲线图







**Operating conditions 使用条件**

- ◇ Product storage Temperature:  $-40^{\circ}\text{C}\sim 120^{\circ}\text{C}$ ( $-40^{\circ}\text{F}\sim 248^{\circ}\text{F}$ );  
产品存储温度:  $-40^{\circ}\text{C}\sim 120^{\circ}\text{C}$ , 在 $40^{\circ}\text{C}$ 时相对湿度不大于70%;
  - ◇ Product storage Humidity:  $T=40^{\circ}\text{C}$  RH $\leq$ 70%,  $T\leq 30^{\circ}\text{C}$  RH $\leq$ 80%,  $T\leq 20^{\circ}\text{C}$  RH $\leq$ 90%;  
在 $30^{\circ}\text{C}$ 以下, 产品相对湿度不大于80, 在 $20^{\circ}\text{C}$ 以下, 相对湿度不大于90%;
  - ◇ Package storage Temperature:  $-40^{\circ}\text{C}\sim 80^{\circ}\text{C}$ ( $-40^{\circ}\text{F}\sim 176^{\circ}\text{F}$ );  
包装存储温度:  $-40^{\circ}\text{C}\sim 80^{\circ}\text{C}$ ;
  - ◇ Fuses can perform regularly under the flowing conditions without corrections;  
熔断器在下述的正常使用条件下工作, 不需要额外的修正;
  - ◇ Regular current flow should  $\leq 75\%$  of recommended rated current;  
推荐长期通流的电流值不大于额定电流的75%;
  - ◇ High frequency vibration resistance:  $\geq 20\text{g}$ ;  
本系列熔断器有良好的抗振动和冲击的耐受能力, 可承受20g以上的加速度;
  - ◇ Intense vibration and shocking conditions need more tests.  
振动较为强烈的应用环境, 可商议进行对应测试, 一般要经过较长的周期。
  - ◇ Replacing fuses if damaging facilities;  
对有机损伤的熔断器必须进行更换;
  - ◇ DO NOT change fuses while loading unless MUST.  
除非使用要求允许, 如熔断器式负荷开关, 否则请勿带负载更换熔断器。
  - ◇ Operating temperature:  $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$  ( $23^{\circ}\text{F}\sim 104^{\circ}\text{F}$ );  
正常使用条件:  $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$ ;
  - ◇ Allowable operating temperature:  $-40^{\circ}\text{C}\sim 125^{\circ}\text{C}$  ( $-40^{\circ}\text{F}\sim 257^{\circ}\text{F}$ );  
允许使用条件:  $-40^{\circ}\text{C}\sim 125^{\circ}\text{C}$ ;
  - ◇ Temperature correction factors: when below  $-5^{\circ}\text{C}$  ( $23^{\circ}\text{F}$ ), low overload (L.O.) pre-arcing time will slightly extend, rated current will slightly increase;  
周围空气温度变化的参数修正: 在低于 $-5^{\circ}\text{C}$ 下工作, 熔断器的低倍过载电流的弧前时间略有延长, 额定电流略有增大, 但是除非 $-5^{\circ}\text{C}$ 以上不是工作范围, 一般不参考增加熔断器额定电流;
  - ◇ If operating above  $40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ), rated current need extra corrections, factors:  $-Kt$ ①.  
熔断器在 $40^{\circ}\text{C}$ 以上工作, 额定电流需要额外的修正, 修正系数为 $-Kt$ 。
- \*Note①: Kt value has already considered the safety current allowance under regular operating scenarios.  
\*注1: Kt的取值已考虑熔断器在正常工作条件下的额定电流安全余量的影响。

