

# 7851 AND 7854 SERIES

## 15 TO 30 AMP PRECISION THERMAL CIRCUIT BREAKER

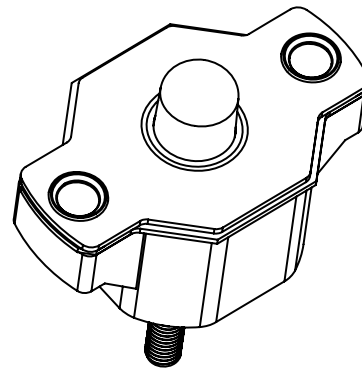
### Introduction

The 7851 and 7854 series thermal breakers were designed to protect wiring and meet the harshest environmental requirements. The 7851 and 7854 series closed construction circuit breakers are weatherproof sealed for protection against moisture, dust, grease, fuel vapors and other harsh environments. The 7851 and 7854 series breakers are compact, lightweight and designed to interrupt short circuits or overloads, and combine trip-free protection with fast response time. Typical applications are protection of wire cable of accessory circuits, equipment and battery protection in construction and off-road equipment, marine, recreational vehicles (RV's), mining, agricultural equipment and electric (hybrid) vehicles.



### Features

- 30VDC or 120VAC, 12.5 to 60 Amps
- Sealed assemblies, manual and automatic reset options
- Ignition protected SAE J1171
- Weatherproof SAE J553
- UL Recognized E36869



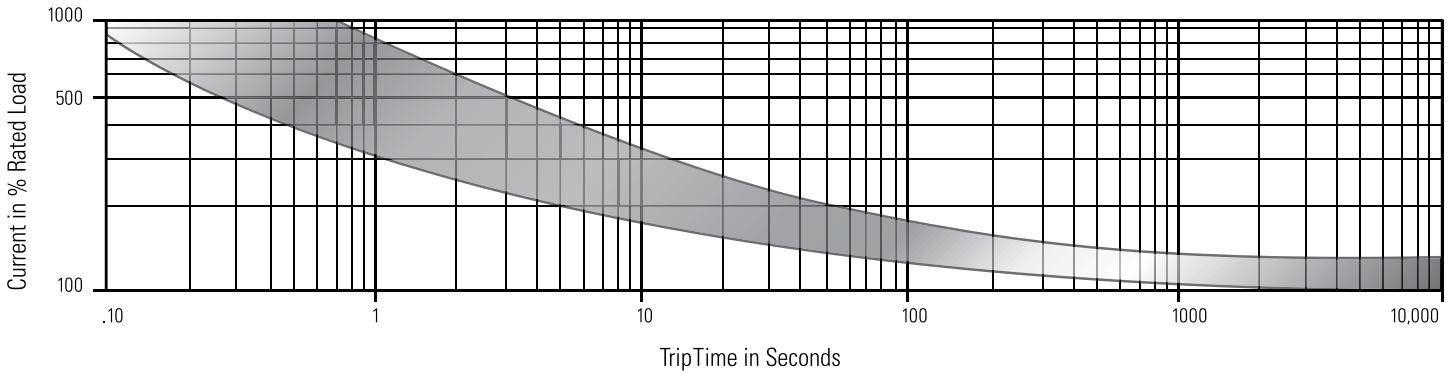
### SPECIFICATIONS

<b>Calibration : 200% rated current, 77°F (25°C)</b>	12.5 to 60 amps : 5 to 55 seconds
<b>Ultimate Trip At 77°F (25°C)</b>	Must hold 100%, Must trip 135%
<b>Endurance</b>	Per SAE J553
<b>Interrupt Current Capacity</b>	Per SAE J553 and ABYC E-11
<b>Vibration</b>	10G MIL-STD-202 Method 204, Condition A
<b>Mechanical Shock</b>	MIL-STD-202 Method 101D
<b>Dielectric Strength</b>	MIL-STD-202 Method 301, 1500VAC min
<b>Insulation Resistance</b>	MIL-STD-202 Method 302, Condition B, 100MΩ min
<b>Weight</b>	7851 : 54 grams max 7854 : 49 grams max



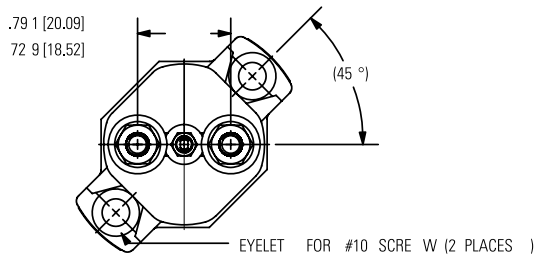
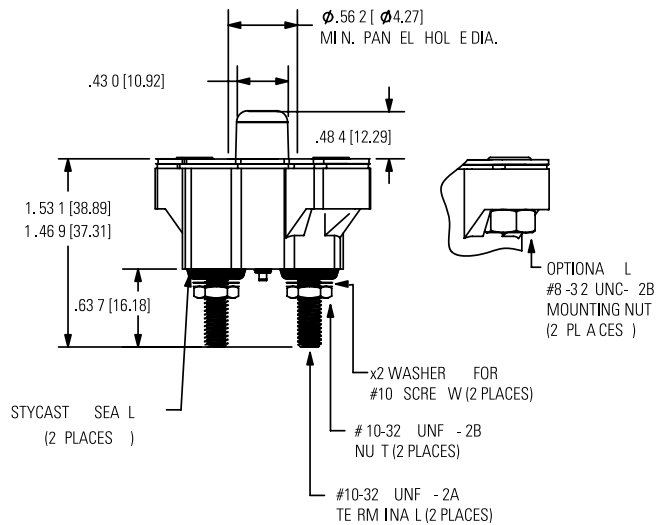
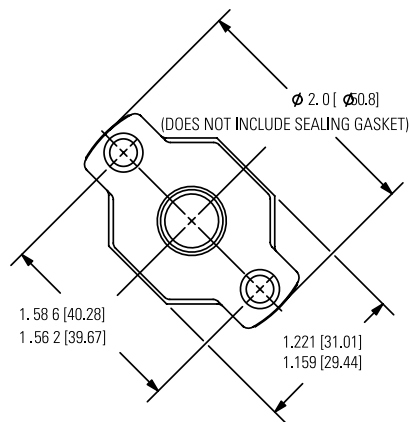
# TRIP CURVE

## Approximate Time, Current Characteristics At 77°F (25°C)



# DIMENSIONS

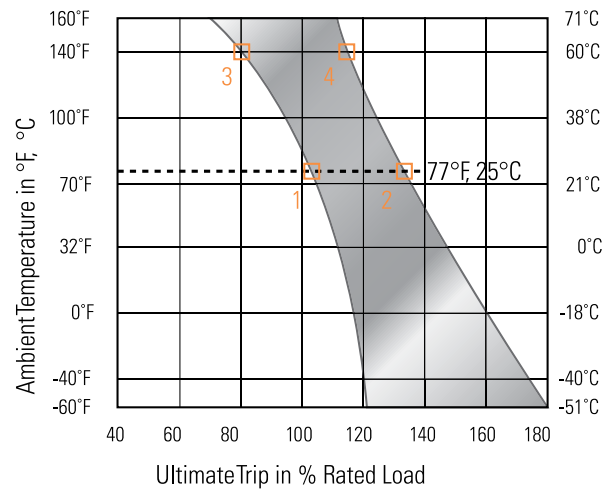
All dimensions are in inches [mm]





## DERATING CURVE

Performance characteristics are based on room temperature (77°F, 25°C). Consult Derating curve for ambient temperatures significantly higher or lower than standard room temperature.  
 Example: At 77°F (25°C) the device is calibrated to hold at 100% of rated current (1) and trip at 135% of rated current (2). At 140°F (60°C), the same device will hold at approximately 78% of rated current (3), and trip at approximately 115% of rated current (4).



## ORDERING OPTIONS

Example : 7851-15-12.5-

**Configuration** 7851 - 15 - 12.5 -

**7851:** Manual, sealed  
**7854:** Auto, sealed

**Stud Length (approx)**

15	25
20	30

**Amp Rating**

12.5	17.5	25	35	50
15	20	30	40	60

**Mounting Nuts**

: leave blank for none  
 !: optional mounting nuts

## CONTACT US

### AUTHORIZED DISTRIBUTORS

#### Americas

Flame Enterprises  
 Contact Name:  
 Bob Correa, Director of Product Management  
 Direct Phone: +1 (240) 236-9802  
 E-mail: bcorrea@flamecorp.com  
 info@flamecorp.com | Web  
 Tel: 1-800-854-2255 or 1-818-700-2905  
 Fax: 1-818-407-5080

Peerless Electronics  
 Contact Name:  
 Steve Gunther, National Sales Manager  
 Direct Phone: +1 (516) 594-3509  
 E-mail: sgunther@peerlesselectronics.com  
 nysales@peerlesselectronics.com | Web  
 Tel: 1-800-285-2121  
 Fax: 1-800-222-8096

#### Europe, Middle East & Africa

Flame Enterprises  
 Contact Name:  
 Bob Correa, Director of Product Management  
 Direct Phone: +1 (240) 236-9802  
 E-mail: bcorrea@flamecorp.com  
 info@flamecorp.com | Web  
 Tel: 1-800-854-2255 or 1-818-700-2905  
 Fax: 1-818-407-5080

### AUTHORIZED SALES REPRESENTATIVES

Country	Representative	Contact	e-mail	Phone
Brazil	Sonnensys Technologies	Maury Sampaio	maury.sampaio@sonnensys.com	+55 12 99768 1100
Austria	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Belgium	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Czech Republic	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Denmark	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Estonia	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Finland	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
France	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Germany	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Greece	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Israel	Admati	Dori Shifman	dori@admati.com	972 (0)50 331 4700
Italy	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Latvia	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Lithuania	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Luxembourg	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Netherlands	TBD			
Norway	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Poland	Radiotechnika	Tomasz Póltoraczyk	tpoltoraczyk@radiotechnika.com.pl	48 7132 70 765
Portugal	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Slovakia	Telemeter	Robert Jall	rjall@telemeter.de	49 906 70693-26
Spain	PanSystem	Stefano Vitone	stefano.vitone@pansystem.com	39 335 7169958
Sweden	Sensor Control Nordic	Peter BJÖRKDAHL	peter.bjorkdahl@scn.se	46 (0)8 122 006 92
Switzerland	JB Controls	Jean Jacques Boher	jboher@jbcontrols.com	33 (0)1 46 91 93 30
Turkey	Eltronik	Ergun Kosem	ergun@eltronik.com	90 312 440 7815
UK	Charcroft	Julie Protheroe	julie.protheroe@charcroft.com	01591 612240
Australia	AeroDefense	Trent Ralph	trent@aerodefence.com.au	+61 7 5503 0552
China	Pomic Ltd.	James Cai	James.cai@pomicltd.com	+1 (360) 915-7806
China (ACCBs only)	Shanghai Jin Feng Electronics & Inst Co	Wang Min-Gang	yonghuqian@vip.sina.com	+86-21-62712648
India	Hical Technologies	VB Venkatesh	venkatesh.vb@hical.com	+91 98450-12341
Indonesia	Precision Technologies	Aaron Lim	aaronlim@pretech.com.sg	+65 (62) 73 45 73 x125
Japan	Intertek Industries	Masa Ikeda	masai@intertekindustries.com	+1 (310) 309-9661
Korea	Aero Sensors Corp.	Jonathan Jo	jangcho@aerosensors.co.kr	+82 2 557 5355
Malaysia	Precision Technologies	Aaron Lim	aaronlim@pretech.com.sg	+65 (62) 73 45 73 x125
New Zealand	AeroDefense	Trent Ralph	trent@aerodefence.com.au	+61 7 5503 0552
Singapore	Precision Technologies	Aaron Lim	aaronlim@pretech.com.sg	+65 (62) 73 45 73 x125
Taiwan	Sensata Technologies	Bob Jacques	bjacques@sensata.com	+1 (805) 716-0586

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.