

# ESP Special Batteries Ltd

Our SFR30F series PTC re-settable fuses provide short-circuit protection in low-voltage DC circuits for short circuit currents up to 40A. Once tripped the device remains latched in a high resistance state until the fault is removed.

## Characteristics

Agency Approvals; UL,C-UL and TÜV

Part Number	$I_{hold}$ (A)	$I_{trip}$ (A)	$V_{max}$ (Vdc)	$I_{max}$ (A)	$P_d^{max}$ (W)	Max Time to Trip @ 23°C 5 x lh		Resistance @ 23°C		Maximum Dimension (mm)		
						Current (A)	Time (Sec.)	$R_{min}$ (Ω)	$R_{1max}$ (Ω)	A	B	C
SFR30F090F	0.90	1.80	30	40	0.6	4.50	5.9	0.070	0.22	7.4	12.2	5.1
SFR30F110F	1.10	2.20	30	40	0.7	5.50	6.6	0.050	0.17	7.4	14.2	5.1
SFR30F135F	1.35	2.70	30	40	0.8	6.75	7.3	0.040	0.13	8.9	13.5	5.1
SFR30F160F	1.60	3.20	30	40	0.9	8.00	8.0	0.030	0.11	8.9	15.2	5.1
SFR30F185F	1.85	3.70	30	40	1.0	9.25	8.7	0.030	0.09	10.2	15.7	5.1
SFR30F250F	2.50	5.00	30	40	1.2	12.5	10.3	0.020	0.07	11.4	18.3	5.1
SFR30F300F	3.00	6.00	30	40	2.0	15.0	10.8	0.020	0.08	11.4	17.3	5.1
SFR30F400F	4.00	8.00	30	40	2.5	20.0	12.7	0.010	0.05	14.0	20.1	5.1
SFR30F500F	5.00	10.00	30	40	3.0	25.0	14.5	0.010	0.05	14.0	24.9	10.2
SFR30F600F	6.00	12.00	30	40	3.5	30.0	16.0	0.005	0.04	16.5	24.9	10.2
SFR30F700F	7.00	14.00	30	40	3.8	35.0	17.5	0.005	0.03	19.1	26.7	10.2
SFR30F800F	8.00	16.00	30	40	4.0	40.0	18.8	0.005	0.02	21.6	29.2	10.2
SFR30F900F	9.00	18.00	30	40	4.2	40.0	20.0	0.005	0.02	24.1	29.7	10.2

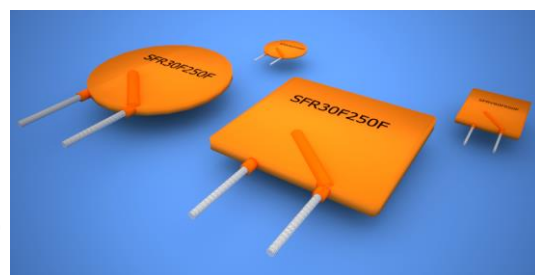
## Definitions

$I_{hold}$  = Hold current, maximum current PTC will pass without tripping in 23°C still air.

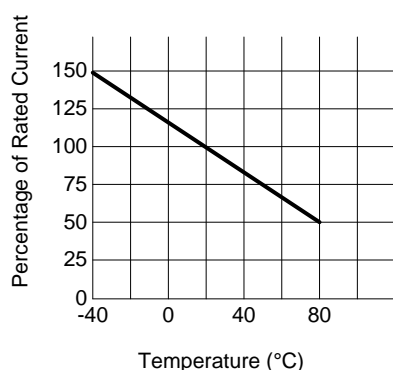
$I_{trip}$  = Trip current, minimum current at which the PTC will trip in still air at 23°C.

$V_{max}$  = Maximum voltage PTC can withstand without damage at rated current ( $I_{max}$ )

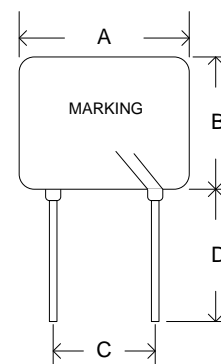
$I_{max}$  = Maximum fault current PTC can withstand without damage at rated voltage ( $V_{max}$ )



## Thermal De-Rating Curve



## Configuration



Dimensions – see above table

**CAUTION:** Operating beyond the specified maximum ratings may result in device damage and cause possible arcing and flame.