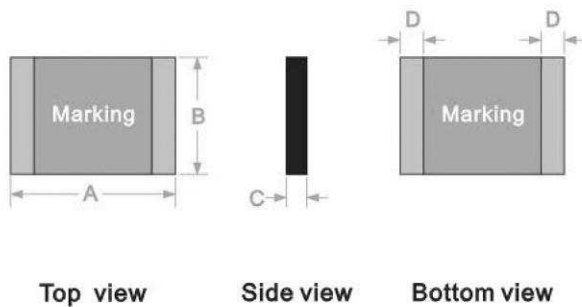


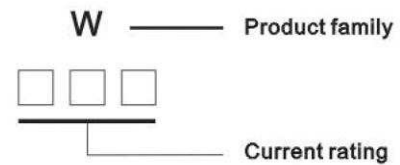
# ESKA Fuses

## ■Product Dimensions(mm)

Part Number	A	B	C	D
	Max.	Max.	Max.	Max.
LP-MSM010	4.73	3.41	0.81	0.60
LP-MSM014	4.73	3.41	0.81	0.60
LP-MSM020	4.73	3.41	0.81	0.60
LP-MSM050	4.73	3.41	0.61	0.60
LP-MSM075	4.73	3.41	0.61	0.60
LP-MSM110	4.73	3.41	0.61	0.60
LP-MSM125	4.73	3.41	1.25	0.60
LP-MSM150	4.73	3.41	1.25	0.60
LP-MSM160	4.73	3.41	1.25	0.60
LP-MSM190	11.51	5.33	0.55	0.60
LP-MSM200	4.73	3.41	1.25	0.60
LP-MSM260	4.73	3.41	2.25	0.60



## ■Part Marking System



## ■Electrical Characteristics

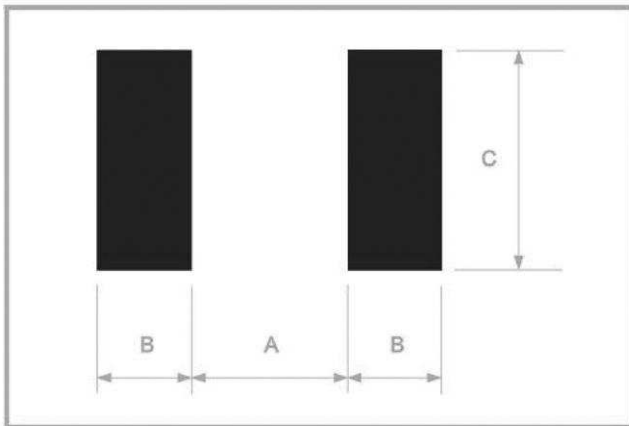
Part Number	$I_H$	$I_T$	$V_{max}$	$I_{max}$	$T_{trip}$		$Pd_{typ}$	$R_{min}$	$R_{1max}$
	(A)	(A)	(V)	(A)	Current(A)	Time(S)	(W)	( $\Omega$ )	( $\Omega$ )
LP-MSM010	0.10	0.20	60.0	10	1.5	0.15	1.0	0.700	6.000
LP-MSM014	0.14	0.34	60.0	10	1.5	0.15	1.0	0.700	6.000
LP-MSM020	0.20	0.40	30.0	10	6.0	0.06	1.0	0.600	5.000
LP-MSM050	0.50	1.00	15.0	40	8.0	0.15	1.0	0.150	1.000
LP-MSM075	0.75	1.50	13.2	40	8.0	0.20	1.0	0.100	0.480
LP-MSM110	1.10	2.20	6.0	40	8.0	0.30	1.0	0.040	0.260
LP-MSM125	1.25	2.50	6.0	40	8.0	0.40	1.0	0.070	0.250
LP-MSM150	1.50	3.00	6.0	40	8.0	0.50	1.0	0.040	0.110
LP-MSM160	1.60	2.80	6.0	40	8.0	1.00	1.0	0.030	0.100
LP-MSM190	1.90	3.80	16.0	100	10.0	2.00	1.5	0.024	0.080
LP-MSM200	2.00	3.50	6.0	40	8.0	2.00	1.0	0.020	0.060
LP-MSM260	2.60	5.20	6.0	40	8.0	2.50	1.0	0.015	0.047

- $I_H$  = Hold current: maximum current at which the device will not trip at 25°C still air.
- $I_T$  = Trip current: minimum current at which the device will always trip at 25°C still air.
- $V_{max}$  = Maximum voltage device can withstand without damage at rated current.
- $I_{max}$  = Maximum fault current device can withstand without damage at rated voltage.
- $T_{trip}$  = Maximum time to trip(s) at assigned current.
- $Pd_{typ}$  = Typical power dissipation: typical amount of power dissipated by the device when in state air environment.
- $R_{min}$  = Minimum device resistance at 25°C prior to tripping.
- $R_{tmax}$  = Maximum device resistance measured in the nontripped state 1 hour post reflow.

## Test Procedures And Requirements

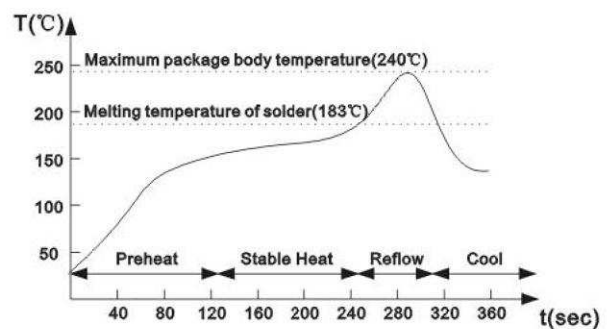
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{tmax}$
Time to Trip	Specified current, $V_{max}$ , 25°C	$T \leq \text{max. Time to trip}(T_{trip})$
Hold Current	30 min, at $I_H$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or buring
Trip Endurance	$V_{max}$ , 24hours	No arcing or buring

## Pad Dimensions



Part Number	A mm	B mm	C mm
LP-MSM010	3.45	1.78	3.15
LP-MSM014	3.45	1.78	3.15
LP-MSM020	3.45	1.78	3.15
LP-MSM050	3.45	1.78	3.15
LP-MSM075	3.45	1.78	3.15
LP-MSM110	3.45	1.78	3.15
LP-MSM125	3.45	1.78	3.15
LP-MSM150	3.45	1.78	3.15
LP-MSM160	3.45	1.78	3.15
LP-MSM190	9.57	1.45	4.75
LP-MSM200	3.45	1.78	3.15
LP-MSM260	3.45	1.78	3.15

## Solder Reflow Recommendations



- Recommended reflow methods: IR, Vapor phase oven, hot air oven, wave solder.
- Devices can be cleaned using standard industry methods and solvents.

### Notes:



If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

## Agency Recognition

UL, CSA.....E202125  
TUV .....R02134634



## Package Information

### Bulk:

- LP-MSM190.....1000pcs per bag

### Tape & Reel:

- LP-MSM010~LP-MSM260.....2000pcs per reel