Transient Voltage Suppressors (High Current)

MHC-L Series

MERITEK

RoHS

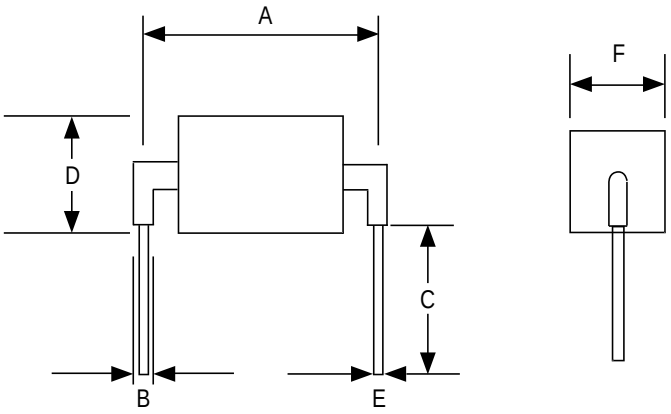
FEATURES

- Axial lead terminals.
- High current transient suppressor.
- Excellent Clamping Capability.
- Glass Passivated Junction.
- Bi-directional.
- Low Slope Resistance.
- Repetition Rate (duty cycle): 0.01%.
- RoHS Compliant.
- High Temperature soldering: 260°C/10 seconds at terminals.
- Epoxy Encapsulated.

MAXIMUM RATINGS AND CHARACTERISTICS

RATING	SYMBOL	VALUE		UNIT
Current Rating	I_{PP}	MHC-A-L	3	KAmps
		MHC-B-L	6	
		MHC-C-L	10	
		MHC-D-L	16	
Operating junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150		°C

PACKAGE DIMENSIONS



MHC-A/-B/-C(012-190)-L Series Dimensions			MHC-C-200L/MHC-D-L Series Dimensions		
Dimensions	Inches	Millimeters	Dimensions	Inches	Millimeters
A	0.95	24.15	A	0.95	24.15
B	0.1	2.5	B	0.1	2.5
C	0.24	6(reference)	C	0.24	6(reference)
D	0.510max	13.0max	D	0.630max	14.8max
E	0.05	1.28	E	0.05	1.28
F	0.510max	13.0max	F	0.630max	14.8max
The tolerance for dimensions: ± 20%.					

SPECIFICATIONS

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Energy	Maximum Clamping Voltage	Reverse Leakage
	V_{AC}(V)	V_{DC}(V)	V_{BR}(V) MIN.@IT	IT(mA)	Rated IPP measured with 8/20us pulse	10/1000μs	VC(V) @IPP	I_R(μA) @VDC
MHC-A-012L	8.5	12.8	14	1	3KA	500	28	20
MHC-A-015L	11	15	17	1	3KA	650	30	20
MHC-A-020L	14	20	22	1	3KA	800	40	20
MHC-A-025L	17	25	28	1	3KA	950	50	20
MHC-A-030L	21	30	33	1	3KA	1200	60	20
MHC-A-042L	30	42	47	1	3KA	1700	77	20
MHC-A-058L	40	58	64	1	3KA	2450	110	20
MHC-A-066L	45	66	70	1	3KA	2600	125	20
MHC-A-076L	54	76	85	1	3KA	2800	140	20
MHC-A-100L	72	100	110	1	3KA	4250	165	20
MHC-A-133L	100	133	147	1	3KA	5300	220	20
MHC-A-170L	130	170	180	1	3KA	7000	260	20
MHC-A-190L	145	190	200	1	3KA	8400	290	20
MHC-A-200L	150	200	222	1	3KA	8600	330	20
MHC-A-240L	180	240	250	1	3KA	9100	340	20
MHC-A-275L	210	275	300	1	3KA	9500	435	20
MHC-A-300L	230	300	330	1	3KA	12750	470	20
MHC-A-380L	275	380	401	1	3KA	15000	520	20
MHC-A-430L	310	430	440	1	3KA	18000	625	20
MHC-A-460L	330	460	500	1	3KA	18500	770	20
MHC-A-500L	385	500	558	1	3KA	19500	868	20
MHC-B-012L	8.5	12.8	14	1	6KA	1000	28	20
MHC-B-015L	11	15	17	1	6KA	1300	30	20
MHC-B-020L	14	20	22	1	6KA	1600	40	20
MHC-B-025L	17	25	28	1	6KA	1900	50	20
MHC-B-030L	21	30	33	1	6KA	2400	60	20
MHC-B-042L	30	42	47	1	6KA	3400	77	20

Note: 1. T_A = 25℃ unless otherwise specified.

2. Using 8/20μs wave shape pulses as defined in IEC61000-4-5.

SPECIFICATIONS

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Energy	Maximum Clamping Voltage	Reverse Leakage
	V_{AC}(V)	V_{DC}(V)	V_{BR}(V) MIN.@IT	IT(mA)	Rated IPP measured with 8/20us pulse	10/1000μs	VC(V) @IPP	I_R(μA) @VDC
MHC-B-058L	40	58	64	1	6KA	4900	110	20
MHC-B-066L	45	66	70	1	6KA	5200	125	20
MHC-B-076L	54	76	83	1	6KA	5600	135	20
MHC-B-100L	72	100	110	1	6KA	8500	165	20
MHC-B-133L	100	133	147	1	6KA	10600	220	20
MHC-B-170L	130	170	180	1	6KA	14000	260	20
MHC-B-190L	145	190	200	1	6KA	16800	290	20
MHC-B-200L	150	200	222	1	6KA	17200	330	20
MHC-B-240L	180	240	250	1	6KA	18000	340	20
MHC-B-275L	210	275	300	1	6KA	19000	435	20
MHC-B-300L	230	300	330	1	6KA	25500	470	20
MHC-B-380L	275	380	401	1	6KA	30000	520	20
MHC-C-012L	8.5	12.8	14	1	10KA	1665	28	20
MHC-C-015L	11	15	17	1	10KA	2164	30	20
MHC-C-020L	14	20	22	1	10KA	2664	40	20
MHC-C-025L	17	25	28	1	10KA	3163	50	20
MHC-C-030L	21	30	33	1	10KA	3996	60	20
MHC-C-042L	30	42	47	1	10KA	5661	77	20
MHC-C-058L	40	58	64	1	10KA	8158	110	20
MHC-C-066L	45	66	70	1	10KA	8658	125	20
MHC-C-076L	54	76	83	1	10KA	9324	135	20
MHC-C-100L	72	100	110	1	10KA	14152	165	20
MHC-C-133L	100	133	147	1	10KA	17649	220	20
MHC-C-170L	130	170	180	1	10KA	23310	260	20
MHC-C-190L	145	190	200	1	10KA	27972	290	20
MHC-C-200L	150	200	222	1	10KA	28638	330	20
MHC-D-012L	8.5	12.8	14	1	16KA	2665	28	20

Note: 1. T_A = 25℃ unless otherwise specified.

2. Using 8/20μs wave shape pulses as defined in IEC61000-4-5.

SPECIFICATIONS

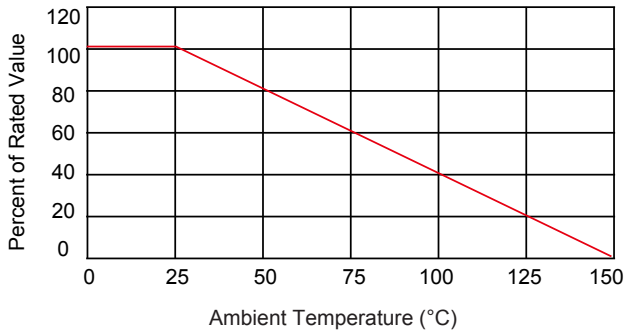
Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Energy	Maximum Clamping Voltage	Reverse Leakage
	V_{AC}(V)	V_{DC}(V)	V_{BR}(V) MIN.@IT	IT(mA)	Rated IPP measured with 8/20us pulse	10/1000μs	VC(V) @IPP	I_R(μA) @VDC
MHC-D-015L	11	15	17	1	16KA	3464	30	20
MHC-D-020L	14	20	22	1	16KA	4264	40	20
MHC-D-025L	17	25	28	1	16KA	5063	50	20
MHC-D-030L	21	30	33	1	16KA	6396	60	20
MHC-D-042L	30	42	47	1	16KA	9061	77	20
MHC-D-058L	40	58	64	1	16KA	13058	110	20
MHC-D-066L	45	66	70	1	16KA	13858	125	20
MHC-D-076L	54	76	85	1	16KA	14924	145	20
MHC-D-100L	72	100	110	1	16KA	22652	165	20
MHC-D-133L	100	133	147	1	16KA	28249	220	20
MHC-D-170L	130	170	180	1	16KA	37310	260	20
MHC-D-190L	145	190	200	1	16KA	44772	290	20

Note: 1. T_A = 25℃ unless otherwise specified.

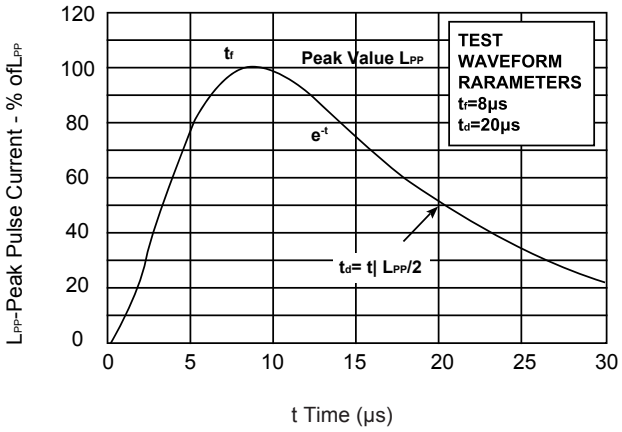
2. Using 8/20μs wave shape pulses as defined in IEC61000-4-5.

FLOW/WAVE SOLDERING RECOMMENDATION PARAMETERS

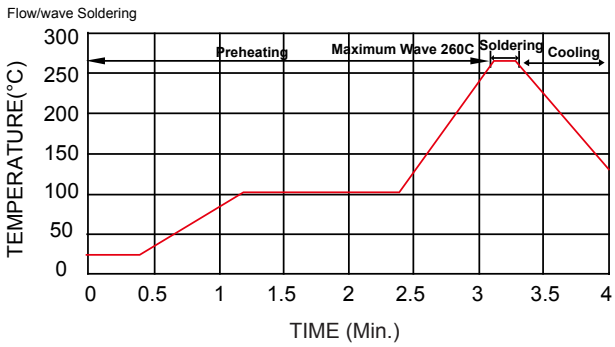
PEAK POWER DERATING



PULSE WAVE FORM



FLOW/WAVE SOLDERING
RECOMMENDATION PARAMETERS



Peak Temperature:	265 °C
Dipping Time:	10 seconds
Soldering:	1 time