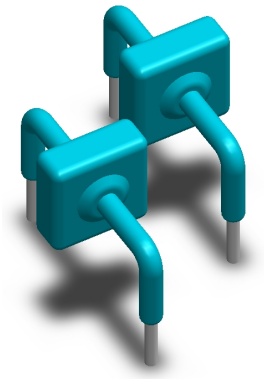
Radial Lead Transient Voltage Suppressors (TVS)

KD Series 15KA

Description

The KD Series of high current transient suppressors have been specially designed for use in A.C. line protection and any demanding applications (AC or DC). Any voltage rise due to increased current conduction is contained to a minimum, providing the best possible protection level. They can also be connected in series and/or parallel to create very high capacity protection solutions.

Bi-directional



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%
- Hazardous Substances Free
- RoHS Compliant
- High Temperature soldering: 260°C/10 seconds at terminals
- Epoxy Encapsulated
- Silver plated leads
- Solderable per MIL-STD-202 Method 208

Functional Diagram



Bi-directional

Maximum Ratings (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating junction	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Current Rating[1]	I_{PP}	1	KA

Notes:

1. Rated IPP measured with 8 × 20μs pulse.

Electrical Characteristics (T_A=25℃ unless otherwise noted)

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Clamping Voltage	Reverse Leakage
	VAC(V)	VDC(V)	V_{BR}(V) MIN.@I_T	I_T (mA)	I_{PP} 8/20μs (KA)	V_C(V) @I_{PP}	I_R(μA) @VDC
KD-058	40	58	64	10	15	110	20
KD-076	54	76	85	10	15	145	20

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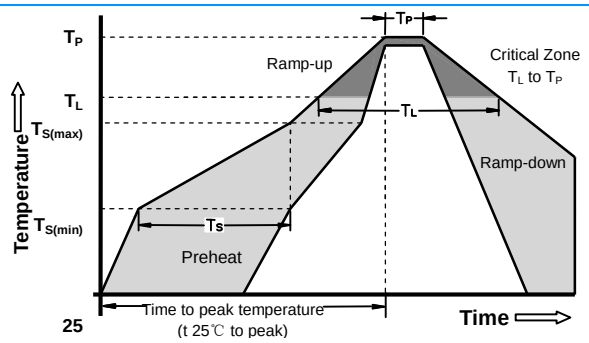
KD Series 15KA

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted) (Continued)

Physical Specifications

Weight	Contact manufacturer
Case	Epoxy encapsulated
Terminal	Silver plated leads, solderable per MIL-STD-750, Method 2026

Soldering Parameters



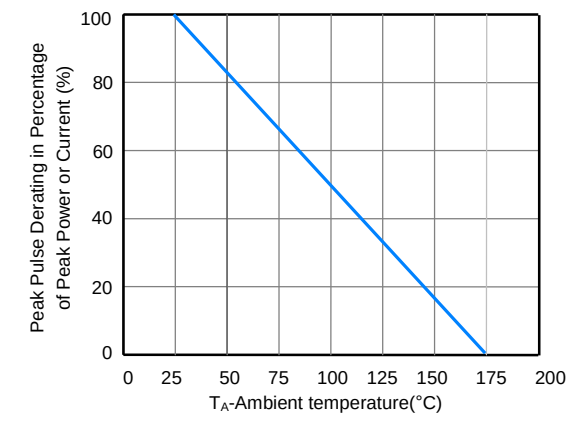
Reflow Condition		Lead–free assembly
Pre Heat	**-Temperature Min ($T_{S(min)}$)**	150°C
	-Temperature Max ($T_{S(max)}$)	200°C
	- Time (min to max) (t_s)	60 -180 Seconds
Average ramp up rate (Liquidus Temp T_L) to peak		3°C/second max
$T_{S(max)}$ to TL - Ramp-up Rate		3°C/second max
Reflow	**- Temperature (T_L) (Liquidus)**	217°C
	- Time (min to max) (t_s)	60 -150 Seconds
Peak Temperature (T_P)		260 +0/-5°C
Time within 5°C of actual peak Temperature (t_p)		20 -40 Seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max
Do not exceed		280°C

Flow/Wave Soldering (Solder Dipping)

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

Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

Pulse Derating Curve

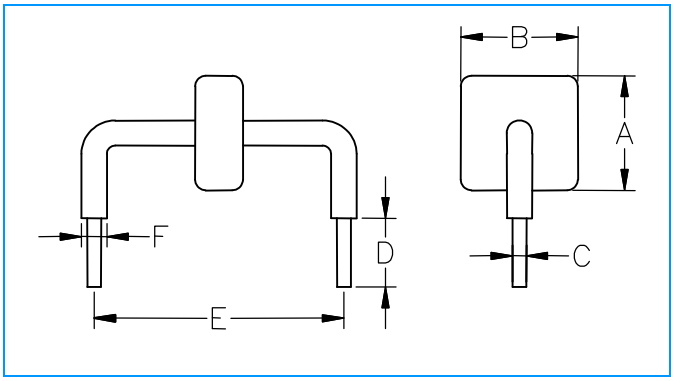


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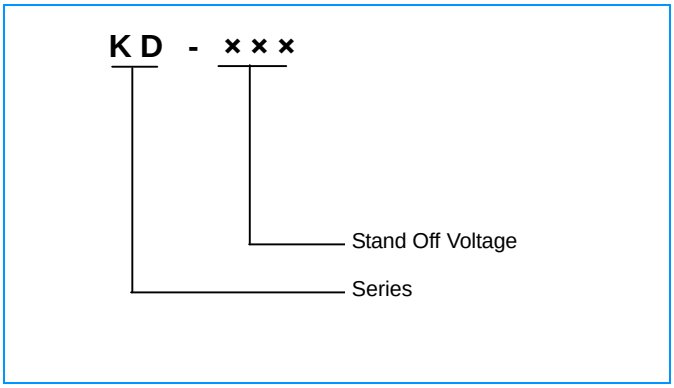
KD Series 15KA

Dimensions



Dimensions	Inches	Millimeters
A	max 0.571	max 14.5
B	Max0.500	max 12.7
C	Φ0.051±0.004	Φ1.30±0.1
D	0.236±0.040	6.0±1.0
E	0.950±0.028	24.15±0.7
F	max 0.10	max 2.5

Part Numbering



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