

High Power TVS Diodes

OUTLINE

AKM



FEATURES

- High Power TVS Design in SMD package.
- Glass Passivated Die Construction.
- 10000A Maximum Reverse Pulse Peak Current.
- Bi-Directional Versions Available.
- Innovative Automatic multi-layer pick and place assembly technology.
- Low clamping and slope resistance.
- Pb-free (IPC/JEDEC J-STD-609A.01)
- Ideal for Automatic pick and place assembly.
- Reduce the manufacturing cost and increase the soldering quality compared to Axial leads package.
- Plastic Case Material has UL Flammability Classification Rating 94V-0.

INFORMATION

- High Current Bidirectional Power TVS diodes
AKM10-xxC are design for use in high power DC Bus clamping applications
- Available with standoff voltage rating 58V to 76V
- RoHS* compliant and meet IEC 61000-4-5 8/20 μ s current surge requirements

MECHANICAL DATA

- Case: AKM, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-202 Method 208
- Marking: Device Code
- Weight: 4.3 grams (approx.)

MAXIMUM RATINGS AND Characteristics @TA=25°C unless otherwise specified

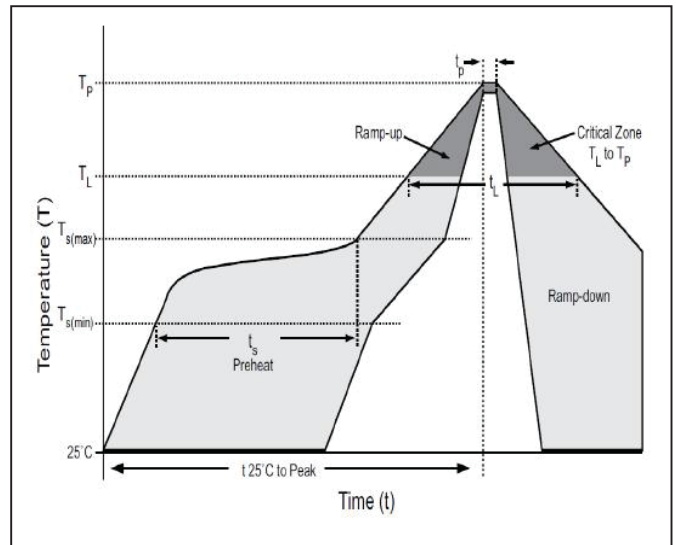
Rating	Symbols	Value		Units
Repetitive Standoff Voltage	V _{SO}	AKM10-58C	58	V
		AKM10-66C	66	
		AKM10-76C	76	
Peak Current Rating per 8/20 μ s IEC 61000-4-5	I _{PPM}	10000		A
Operating Junction Temperature Range	T _J	-55 ~ +125		°C
Storage Temperature Range	T _{STG}	-55 ~ +150		°C

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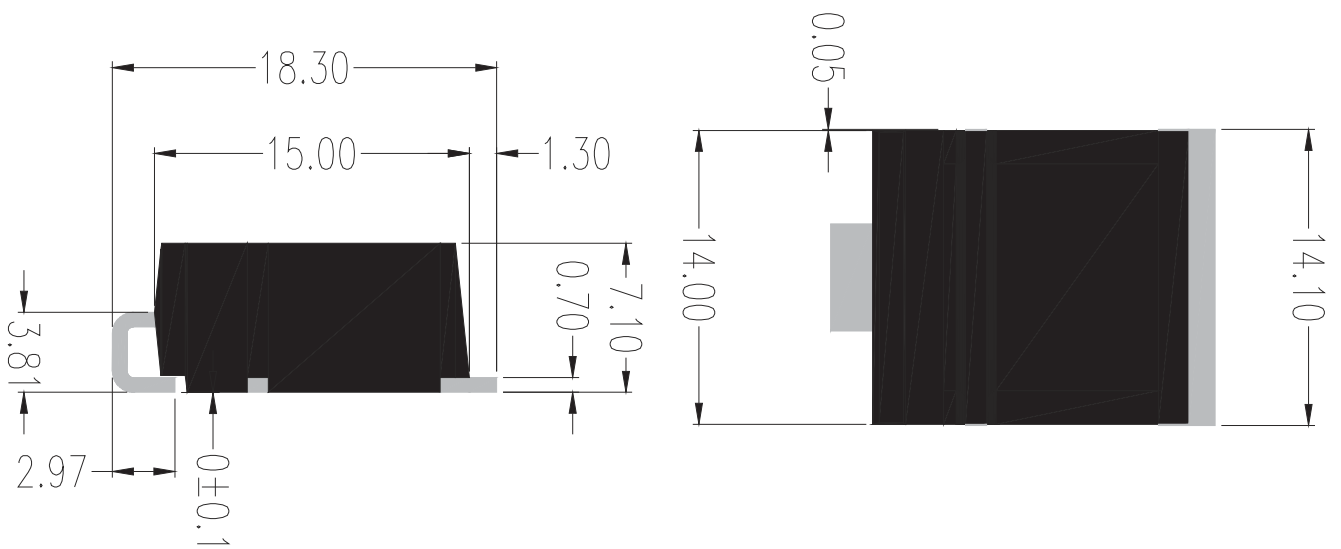
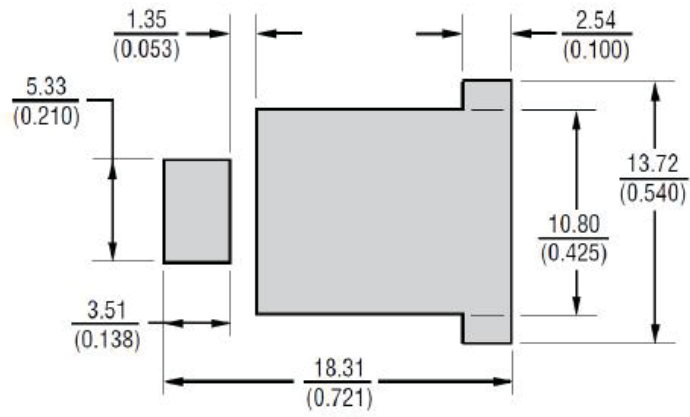
Part Numbers	Standoff Voltage (V _{WM}) (V)	Max. Reverse Leakage (IR) @V _{WM} (uA)	Reverse Breakdown Voltage (V _{BR}) @IT		Test Current IT (mA)	Max. Clamping Voltage V _{CL} @Peak Pulse Current (IPP)				
			Min Volts	Max Volts		VCL Volts	IPP (10/350uS) (A)		IPP (10/350uS) (A)	
							Min	Typ	Min	Typ
AKM10-58C	58	10	64	70	10	110	10000	-	1400	-
AKM10-66C	66	10	72	80	10	120	10000	-	950	-
AKM10-76C	76	10	85	95	10	140	10000	-	1400	-

SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150° C
	Temperature Max (Ts(max))	200° C
	Time (min to max) (ts)	60 – 180 secs
Reflow	Temperature (TA) (Liquidus)	217° C
	Time (min to max) (ts)	60 – 150 secs
Peak Temperature (TP)		255 - 265 °C
Time 25° C to peak Temperature (TP)		8 minutes Max



OUTLINE DIMENSIONS - AKM Unit:mm



Drawing tolerance :0.1mm