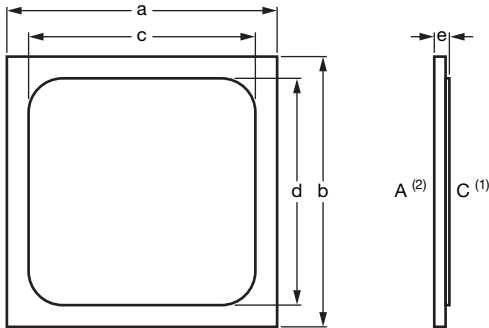


**PAR[®] Transient Voltage Suppressor
Bare Die (134 mils x 134 mils)**



FEATURES

- Junction passivation optimized design passivated anisotropic rectifier technology
- 3000 W peak pulse power capability with a 10/1000 μ s waveform in equivalent package
- Unidirectional polarity only

CIRCUIT DIAGRAM



Notes

- (1) Front metallization side: Cathode
- (2) Back metallization side: Anode

MECHANICAL DATA											
DEVICE ⁽¹⁾	ASSEMBLY	DIMENSIONS in inches (millimeters)						TYPICAL TOTAL METAL THICKNESS			
		CHIP SIZE		SOLDERABLE		CHIP THICKNESS		FRONT SIDE C		BACK SIDE A	
		a, b		c, d		e		METAL	THICKNESS	METAL	THICKNESS
		min.	max.	min.	max.	min.	max.				
TV134T...S4PV	Solderable	0.132 (3.353)	0.134 (3.404)	0.120 (3.048)	0.122 (3.099)	0.011 (0.279)	0.013 (0.330)	Ni/Au	0.75 μ m	Ni/Au	0.75 μ m

Note

(1) Refer to Device Code definition

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)									
DEVICE	BREAKDOWN VOLTAGE V_{BR} ⁽¹⁾ AT I_T (V)		TEST CURRENT I_T (mA)	STAND-OFF VOLTAGE V_{WM} (V)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_D (μ A)	FINISH GOOD (for reference not guarantee for bare die)			
	MIN.	MAX.				MAXIMUM CLAMPING VOLTAGE ⁽²⁾ V_C AT I_{PPM}		OPERATING JUNCTION TEMPERATURE RANGE	PACKAGE EQUIVALENT PRODUCT ⁽³⁾
						(V)	(A)		
TV134T010S4PV	11.1	12.3	1	10	5	17.0	176	- 65 °C to + 185 °C	3KASMC10A
TV134T011S4PV	12.2	13.5	1	11	5	18.2	165	- 65 °C to + 185 °C	3KASMC11A
TV134T012S4PV	13.3	14.7	1	12	5	19.9	151	- 65 °C to + 185 °C	3KASMC12A
TV134T013S4PV	14.4	15.9	1	13	5	21.5	140	- 65 °C to + 185 °C	3KASMC13A
TV134T014S4PV	15.6	17.2	1	14	5	23.2	129	- 65 °C to + 185 °C	3KASMC14A
TV134T015S4PV	16.7	18.5	1	15	5	24.4	123	- 65 °C to + 185 °C	3KASMC15A
TV134T016S4PV	17.8	19.7	1	16	5	26.0	115	- 65 °C to + 185 °C	3KASMC16A
TV134T017S4PV	18.9	20.9	1	17	5	27.6	109	- 65 °C to + 185 °C	3KASMC17A
TV134T018S4PV	20.0	22.1	1	18	5	29.2	103	- 65 °C to + 185 °C	3KASMC18A
TV134T020S4PV	22.2	24.5	1	20	5	32.4	92.6	- 65 °C to + 185 °C	3KASMC20A
TV134T022S4PV	24.4	26.9	1	22	5	35.5	84.5	- 65 °C to + 185 °C	3KASMC22A
TV134T024S4PV	26.7	29.5	1	24	5	38.9	77.1	- 65 °C to + 185 °C	3KASMC24A
TV134T026S4PV	28.9	31.9	1	26	5	42.1	71.3	- 65 °C to + 185 °C	3KASMC26A
TV134T028S4PV	31.1	34.4	1	28	5	45.4	66.1	- 65 °C to + 185 °C	3KASMC28A
TV134T030S4PV	33.3	36.8	1	30	5	48.4	62.0	- 65 °C to + 185 °C	3KASMC30A

TV134T...S4PV Series

Vishay General Semiconductor



ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
DEVICE	BREAKDOWN VOLTAGE V _{BR} (1) AT I _T (V)		TEST CURRENT I _T (mA)	STAND-OFF VOLTAGE V _{WM} (V)	MAXIMUM REVERSE LEAKAGE AT V _{WM} I _D (μA)	FINISH GOOD (for reference not guarantee for bare die)			
	MIN.	MAX.				MAXIMUM CLAMPING VOLTAGE (2) V _C AT I _{PPM}		OPERATING JUNCTION TEMPERATURE RANGE	PACKAGE EQUIVALENT PRODUCT (3)
						(V)	(A)		
TV134T033S4PV	36.7	40.6	1	33	5	53.3	56.3	- 65 °C to + 185 °C	3KASMC33A
TV134T036S4PV	40.0	44.2	1	36	5	58.1	51.6	- 65 °C to + 185 °C	3KASMC36A
TV134T040S4PV	44.4	49.1	1	40	5	64.5	46.5	- 65 °C to + 185 °C	3KASMC40A
TV134T043S4PV	47.8	52.8	1	43	5	69.4	43.2	- 65 °C to + 185 °C	3KASMC43A

Notes

- (1) Pulse test: t_p ≤ 50 ms
- (2) Non-repetitive current pulse, per fig. 1
- (3) Package equivalent product quality level information will provide per customer request but only for reference no guarantee bare die can meet the same

PACKAGING			
DEVICE	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY
TV134T...S4PV	V	12 mm tape/8 mm pitch, 7" diameter plastic tape and reel	3000

CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

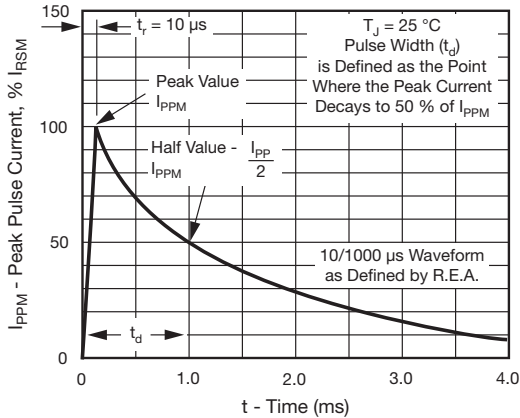
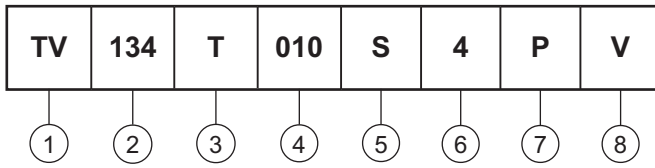


Fig. 1 - Pulse Waveform



DEVICE CODE



- 1** - Transient Voltage Suppressor
- 2** - Die dimensions in mils
- 3** - Patented PAR TVS

B = Named as breakdown voltage (V_{BR})
 T = Named as stand-off voltage (V_{WM})
 L = Load dump rectifier
- 4** - Breakdown voltage (V_{BR})
- 5** - Chip surface metallization (see Mechanical Data table)

A = Bondable
 S = Solderable
- 6** - Wafer diameter in inches

4 = 4" wafer
 6 = 6" wafer
- 7** - Quality level code

P = Packaged die, high reliability grade ⁽¹⁾
 O = Packaged die, commercial grade ⁽¹⁾
 N = Non packaged die ⁽²⁾
- 8** - Packaging (see Packaging table)

Notes

- ⁽¹⁾ Packaged die
 - Existing die in qualified package
- ⁽²⁾ Non packaged die
 - Existing fab. process
 - Non standard die metal
 - Die metal has been qualified
 - No production in packaged form



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