

MDE Semiconductor, Inc.

78-150 Calle Tampico, Unit 210, La Quinta, CA., USA 92253 Tel : 760-564-8656 • Fax : 760-564-2414
1-800-831-4881 Email: sales@mdesemiconductor.com Web: www.mdesemiconductor.com

1N6267 to 1N6303 and 1.5KE SERIES

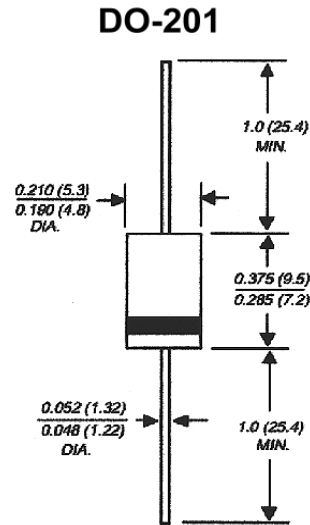
GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR
VOLTAGE- 6.8 TO 440 Volts
1500 Watt Peak Power 5.0 Watt Steady State

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94 V-0
- Glass passivated chip junction in Molded Plastic package
- 1500W surge capability at 1ms
- Excellent clamping capability
- Low zener impedance
- Fast response time: typically less than 1.0 ps from 0 volts to BV min.
- Typical IR less than 1μA above 10V
- High temperature soldering guaranteed: 250°C/10 seconds/ .375", (9.5mm) lead length, 5lbs., (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201 Molded plastic
Terminals: Plated Axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denoted positive end (cathode) except Bipolar
Mounting Position: Any
Weight: 0.045 ounces, 1.2 grams



Dimensions in inches and (millimeters)

DEVICES FOR BIPOLAR APPLICATIONS

For Bidirectional use C or CA Suffix for types 1.5KE6.80 thru types 1.5KE440 (e.g. 1.5KE6.8C, 1.5KE440CA)
Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation at TA = 25 °C, TP = 1ms (NOTE 1)	P _{PPM}	Minimum 1500	Watts
Peak Pulse Current of on 10/1000 μs waveform (Note 1)	I _{PPM}	SEE TABLE 1	Amps
Steady State Power Dissipation at TL = 75°C Lead lengths .375", 9.5mm (Note 2)	P _{M(AV)}	5.0	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load, (JEDEC Method)(Note 3)	I _{FSM}	200	Amps
Maximum instantaneous forward voltage at 100A for unidirectional only(Note 4)	V _F	3.5/5.0	Volts
Operatings and Storage Temperature Range	T _J , T _{STG}	-55 +175	°C

NOTES:

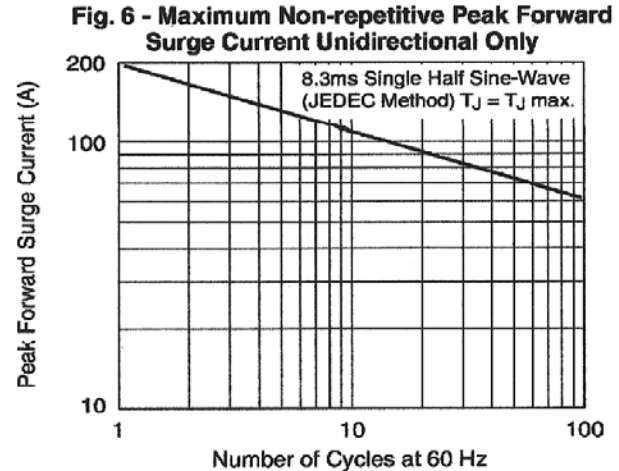
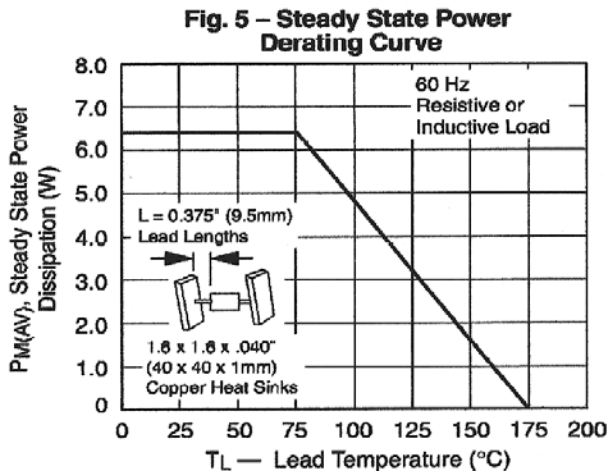
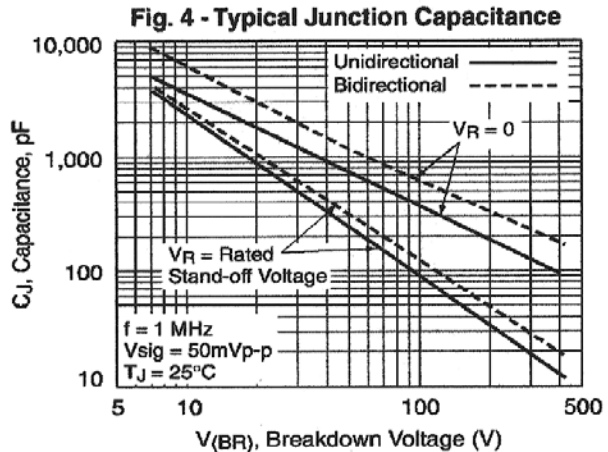
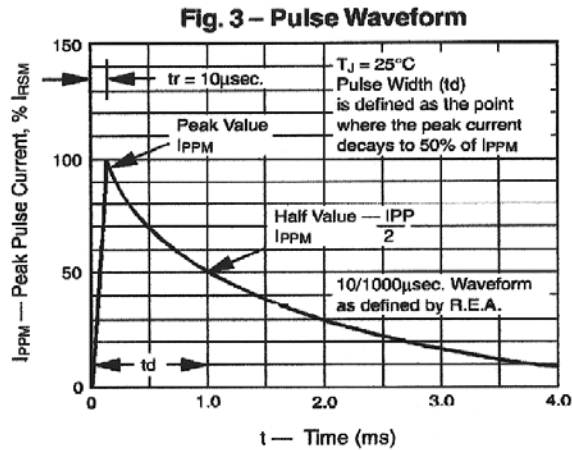
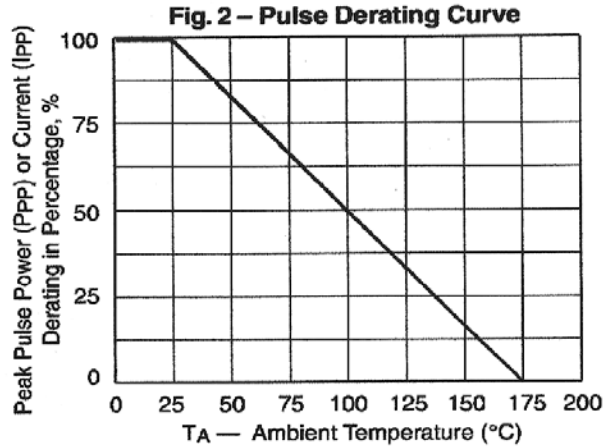
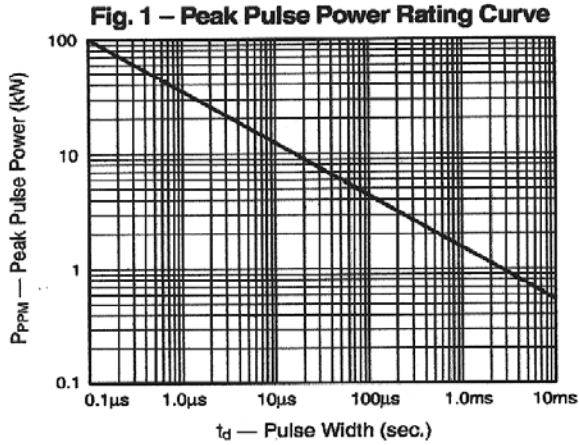
1. Non-repetitive current pulse, per Fig.3 and derated above Ta=25 °C per Fig.2.
2. Mounted on Copper Pad area of 0.8x0.8" (20x20mm) per Fig.5.
3. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle=4 pulses per minutes maximum.
4. Vf=3.5V for 1.5KE220A & below; Vf=5.0 for 1.5KE250A & above

MDE Semiconductor, Inc.

78-150 Calle Tampico, Unit 210, La Quinta, CA., USA 92253 Tel : 760-564-8656 • Fax : 760-564-2414
1-800-831-4881 Email: sales@mdesemiconductor.com Web: www.mdesemiconductor.com

1N6267 to 1N6303 and 1.5KE SERIES

RATING AND CHARACTERISTIC CURVES 1.5KE SERIES



MDE Semiconductor, Inc.

78-150 Calle Tampico, Unit 210, La Quinta, CA., USA 92253 Tel : 760-564-8656 • Fax : 760-564-2414
1-800-831-4881 Email: sales@mdesemiconductor.com Web: www.mdesemiconductor.com

1500 Watt TVS

JEDEC P/N	MDE P/N 1500 WATT 1.5KE SERIES	STANDOFF VOLTAGE (Vso) Volts	MAX. REVERSE LEAKAGE (Ir)@Vso μ A	REVERSE BREAKDOWN VOLTAGE (Vbr) @ It		TEST CURRENT (It) mA	MAX. CLAMPING VOLTAGE (Vcl) @ PEAK PULSE CURRENNT (Ipp)		MAX. TEMP. COEFFICIENT OF Vbr (%/°C)
				Min Volts	Max Volts		Vcl Volts	Ipp Amps	
1N6291	1.5KE68	55.10	5.0	61.20	74.80	1	96.0	15.3	0.104
1N6291A	1.5KE68A	58.10	5.0	64.60	71.40	1	92.0	16.3	0.104
1N6292	1.5KE75	60.70	5.0	67.50	82.50	1	109.0	13.9	0.105
1N6292A	1.5KE75A	64.10	5.0	71.30	78.80	1	104.0	14.6	0.105
1N6293	1.5KE82	66.40	5.0	73.80	90.20	1	118.0	12.7	0.105
1N6293A	1.5KE82A	70.10	5.0	77.90	86.10	1	113.0	13.3	0.105
1N6294	1.5KE91	73.70	5.0	81.90	100.00	1	131.0	11.4	0.106
1N6294A	1.5KE91A	77.80	5.0	86.50	95.50	1	125.0	12.0	0.106
1N6295	1.5KE100	81.00	5.0	90.00	110.00	1	144.0	10.4	0.106
1N6295A	1.5KE100A	85.50	5.0	95.00	105.00	1	137.0	11.0	0.106
1N6296	1.5KE110	89.20	5.0	99.00	121.00	1	158.0	9.5	0.107
1N6296A	1.5KE110A	94.00	5.0	106.00	116.00	1	152.0	9.9	0.107
1N6297	1.5KE120	97.20	5.0	108.00	132.00	1	173.0	8.7	0.107
1N6297A	1.5KE120A	102.00	5.0	114.00	126.00	1	165.0	9.1	0.107
1N6298	1.5KE130	106.00	5.0	117.00	143.00	1	187.0	8.0	0.107
1N6298A	1.5KE130A	111.00	5.0	124.00	137.00	1	179.0	8.4	0.107
1N6299	1.5KE150	121.00	5.0	136.00	165.00	1	215.0	7.0	0.108
1N6299A	1.5KE150A	128.00	5.0	143.00	158.00	1	207.0	7.2	0.108
1N6300	1.5KE160	130.00	5.0	144.00	176.00	1	230.0	6.5	0.108
1N6300A	1.5KE160A	136.00	5.0	152.00	168.00	1	219.0	6.8	0.108
1N6301	1.5KE170	138.00	5.0	153.00	167.00	1	244.0	6.2	0.108
1N6301A	1.5KE170A	145.00	5.0	162.00	179.00	1	234.0	6.4	0.108
1N6302	1.5KE180	146.00	5.0	162.00	198.00	1	256.0	5.8	0.108
1N6302A	1.5KE180A	154.00	5.0	171.00	189.00	1	246.0	6.1	0.108
1N6303	1.5KE200	162.00	5.0	180.00	220.00	1	287.0	5.2	0.108
1N6303A	1.5KE200A	171.00	5.0	190.00	210.00	1	274.0	5.5	0.108
N/A	1.5KE220	175.00	5.0	196.00	242.00	1	344.0	4.3	0.108
N/A	1.5KE220A	185.00	5.0	209.00	231.00	1	328.0	4.6	0.108
N/A	1.5KE250	202.00	5.0	225.00	275.00	1	360.0	5.0	0.110
N/A	1.5KE250A	214.00	5.0	237.00	263.00	1	344.0	5.0	0.110
N/A	1.5KE300	243.00	5.0	270.00	330.00	1	430.0	5.0	0.110
N/A	1.5KE300A	256.00	5.0	285.00	315.00	1	414.0	5.0	0.110
N/A	1.5KE350	284.00	5.0	315.00	385.00	1	504.0	4.0	0.110
N/A	1.5KE350A	300.00	5.0	333.00	368.00	1	482.0	4.0	0.110
N/A	1.5KE400	324.00	5.0	360.00	440.00	1	574.0	4.0	0.110
N/A	1.5KE400A	342.00	5.0	380.00	420.00	1	548.0	4.0	0.110
N/A	1.5KE440	356.00	5.0	396.00	484.00	1	598.0	4.0	0.110
N/A	1.5KE440A	376.00	5.0	418.00	462.00	1	590.0	4.0	0.110

Certified RoHS Compliant
UL File # E223026