FEATURES

DO-201AE

- Glass passivated junction.
- 1500W Peak Pulse Power capability at1.0 ms.
- Excellent clamping capability.
- Low incremental surge resistance.
- Fast response time; typically lessthan 1.0 ps from 0 volts to BV forunidirectional and 5.0 ns forbidirectional.
- Typical I_R less than 1.0 ∝A above 10V.

MECHANICAL DATA

- Case: Molded plastic
- Lead: Pure tin plated lead free, solderable per MIL-STD-202, Method 208.
- Polarity : Color band denotes cathode except bipolar.
- Weight : 0.968 gram.

DEVICES FOR BIPOLAR APPLICATIONS

- Bidirectional types use CA suffix.
- Electrical Characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

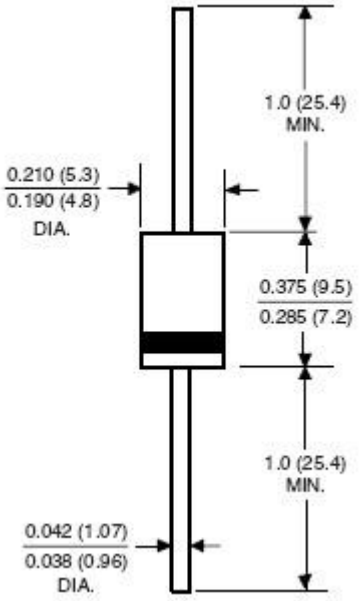
Type Number	Symbol	Value	Units
Peak Power Dissipation at T_A= 25°C, T_p= 1ms (Note 1)	P_{PPK}	Minimum1500	Watts
Steady State Power Dissipation at T_L= 75°C Lead Lengths 0.375 Inch 9.5mm (Note 2)	P_D	5.0	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) (Note 3)	I_{FSM}	200	Amps
Maximum Instantaneous Forward Voltage at 100A for Unidirectional Only (Note 4)	V_F	3.5 / 5.0	Volts
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 175	°C

Notes: Notes: 1. Non-repetitive current pulse and derated above T_A= 25°C.

2. Mounted on copper pad area of 1.6 x 1.6 inch (40 x 40mm) per.
3. 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum.
4. V_F= 3.5V for devices of V_{BR}≤ 200V and V_F= 5.0V maximum for devices of V_{BR}>200V.

PACKAGE DIMENSIONS

DO-201AE



ORDERING INFORMATION

1.5KE □□□ C A

- A — 5% Voltage Tolerance
- C — Bi-Directional
- □□□ — Voltage

PACKAGING

Part Number	Component Package	Quantity
1.5KExxxA/CA	DO-201AE	1000

ELECTRICAL CHARACTERISTICS

1.5KE DEVICES	REVERSE STAND-OFF VOLTAGE V_{RWM}(v)	BREAKDOWN VOLTAGE Min.@I_T V_{BR} Min.(V)	BREAKDOWN VOLTAGE Max.@I_T V_{BR} Max.(V)	TEST CURRENT I_T(mA)	MAXIMUM CLAMPING VOLTAGE @I_{pp} V_C(V)	PEAK PULSE CURRENT I_{pp}(A)	REVERSE LEAKAGE @V_{RWM} I_R(uA)
1.5KE6.8CA/A	5.80	6.45	7.14	10	10.5	144.8	1000
1.5KE7.5CA/A	6.40	7.13	7.88	10	11.3	134.5	500
1.5KE8.2CA/A	7.02	7.79	8.61	10	12.1	125.6	200
1.5KE9.1CA/A	7.78	8.65	9.55	1	13.4	113.4	50
1.5KE10CA/A	8.55	9.50	10.50	1	14.5	104.8	10
1.5KE11CA/A	9.40	10.50	11.60	1	15.6	97.4	5
1.5KE12CA/A	10.20	11.40	12.60	1	16.7	91.0	5
1.5KE13CA/A	11.10	12.40	13.70	1	18.2	83.5	1
1.5KE15CA/A	12.80	14.30	15.80	1	21.2	71.7	1
1.5KE16CA/A	13.60	15.20	16.80	1	22.5	67.6	5
1.5KE18CA/A	15.30	17.10	18.90	1	25.2	60.3	5
1.5KE20CA/A	17.10	19.00	21.00	1	27.7	54.9	1
1.5KE22CA/A	18.80	20.90	23.10	1	30.6	49.7	1
1.5KE24CA/A	20.50	22.80	25.20	1	33.2	45.8	1
1.5KE27CA/A	23.10	25.70	28.40	1	37.5	40.5	1
1.5KE30CA/A	25.60	28.50	31.50	1	41.4	36.7	1
1.5KE33CA/A	28.20	31.40	34.70	1	45.7	33.3	1
1.5KE36CA/A	30.80	34.20	37.80	1	49.9	30.5	1
1.5KE39CA/A	33.30	37.10	41.00	1	53.9	28.2	1
1.5KE43CA/A	36.80	40.90	45.20	1	59.3	25.6	1
1.5KE47CA/A	40.20	44.70	49.40	1	64.8	23.5	1
1.5KE51CA/A	43.60	48.50	53.60	1	70.1	21.7	1
1.5KE56CA/A	47.80	53.20	58.80	1	77.0	19.7	1
1.5KE62CA/A	53.00	58.90	65.10	1	85.0	17.9	1
1.5KE68CA/A	58.10	64.60	71.40	1	92.0	16.5	1
1.5KE75CA/A	64.10	71.30	78.80	1	103.0	14.8	1
1.5KE82CA/A	70.10	77.90	86.10	1	113.0	13.5	1
1.5KE91CA/A	77.80	86.50	95.50	1	125.0	12.2	1
1.5KE350CA/A	300.00	332.00	368.00	1	482.0	3.2	1
1.5KE400CA/A	342.00	380.00	420.00	1	548.0	2.8	1
1.5KE440CA/A	376.00	418.00	462.00	1	602.0	2.5	1
1.5KE480CA/A	408.0	456.0	504.0	1	658.0	2.3	1

TYPICAL CHARACTERISTICS

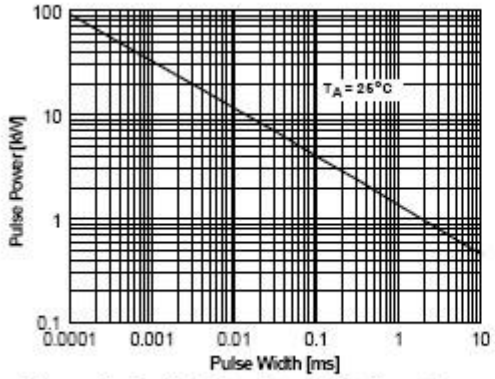


Figure 1. Peak Pulse Power Rating Curve

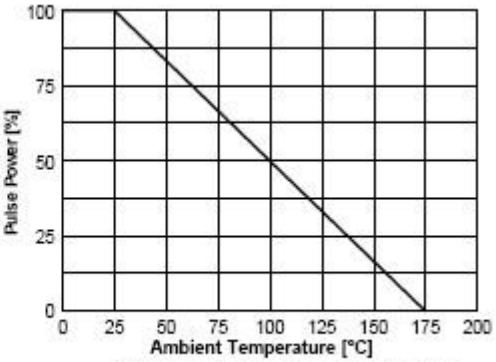


Figure 2. Pulse Derating Curve

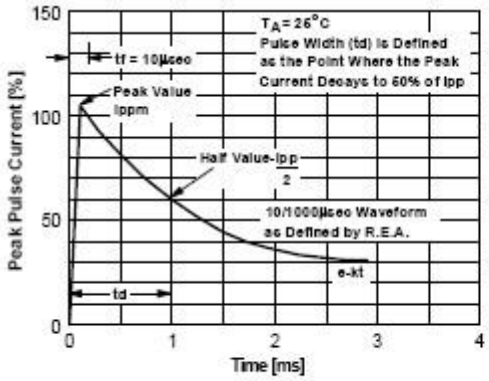


Figure 3. Pulse Waveform

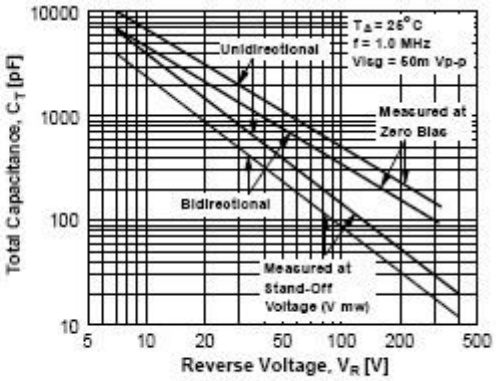


Figure 4. Total Capacitance

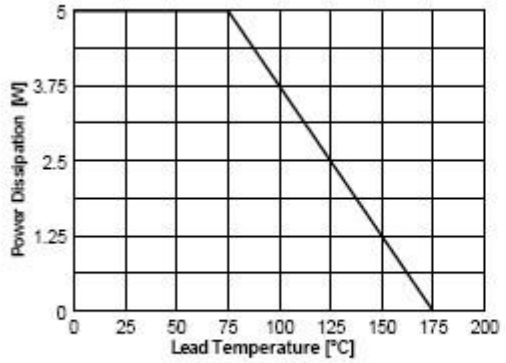


Figure 5. Steady State Power Derating Curve

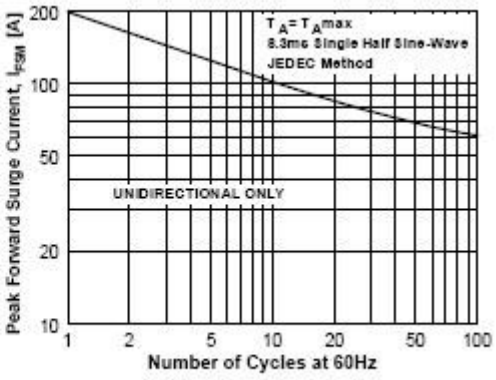


Figure 6. Non-Repetitive Surge Current