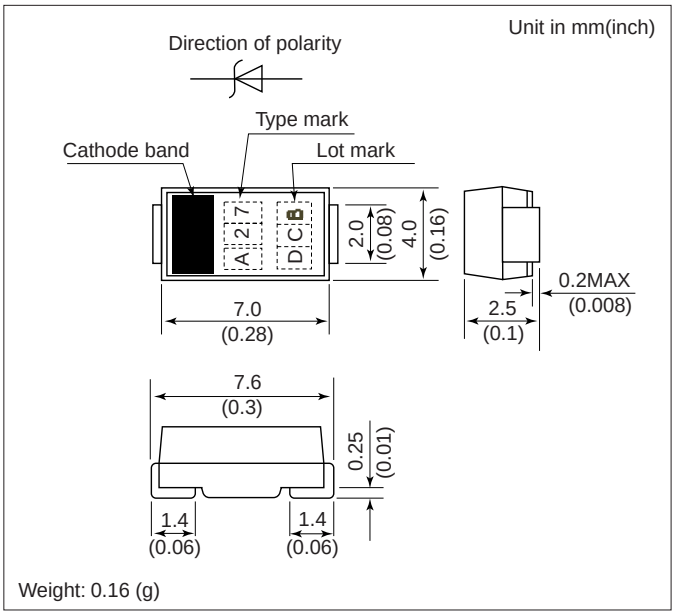
DAM3MA

FEATURES

- High transient reverse power capability suitable for protecting automobile electronic components etc.
- High heat-resistant due to glass passivation.

OUTLINE DRAWING



Weight: 0.16 (g)

ABSOLUTE MAXIMUM RATINGS

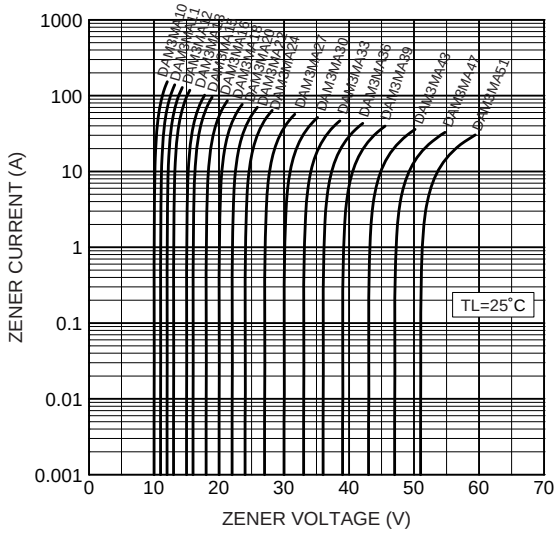
Items	Symbols	Units	Ratings
Non-Repetitive Peak Reverse One-Cycle Dissipation	P_{RSM}	W	1800(Rectangular pulse t=0.1ms T_j=25°C start)
Operating Junction Temperature	T_j	°C	-40 ~ +150
Storage Temperature	T_{stg}	°C	-40 ~ +150
DC Reverse Voltage	V_{DC}	V	Refer to characteristics column

CHARACTERISTICS(T_L=25°C)

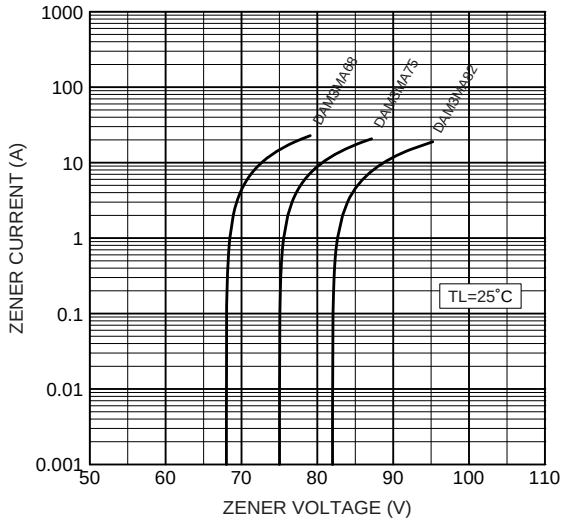
Type	DC Reverse Voltage V_{DC} (V)	Characteristics				Maximum Reverse Current	
		Zener Voltage Vz (V)		Maximum Dynamic Impedance Zz (ohm)	Test Current Iz (mA)	I_{RRM} (μA)	V_R (V)
		Minimum	Maximum				
DAM3MA10	7	9.4	10.6	15	75	10	7
DAM3MA11	8	10.4	11.6	15	75	10	8
DAM3MA12	9	11.4	12.7	15	75	10	9
DAM3MA13	10	12.4	14.1	15	75	10	10
DAM3MA15	11	13.5	15.6	15	75	10	11
DAM3MA16	12	15.3	17.1	15	75	10	12
DAM3MA18	13	16.8	19.1	15	45	10	13
DAM3MA20	14	18.8	21.2	15	45	10	14
DAM3MA22	16	20.8	23.3	15	45	10	16
DAM3MA24	18	22.7	25.6	15	30	10	18
DAM3MA27	20	25.1	28.9	15	30	10	20
DAM3MA30	22	28.0	32.0	15	30	10	22
DAM3MA33	24	31.0	35.0	15	30	10	24
DAM3MA36	26	33.4	38.6	15	30	10	26
DAM3MA39	28	36.1	41.9	30	20	10	28
DAM3MA43	31	39.8	46.2	30	20	10	31
DAM3MA47	34	43.3	50.7	30	20	10	34
DAM3MA51	37	46.9	55.1	30	20	10	37
DAM3MA68	49	61.2	74.8	60	10	5	55
DAM3MA75	54	67.5	82.5	60	10	5	61
DAM3MA82	59	73.8	90.2	60	10	5	66

DAM3MA

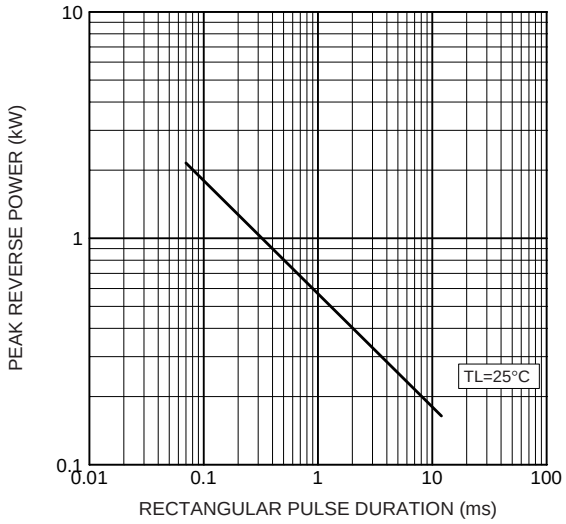
Typical zener characteristics (Vz:10~51V)



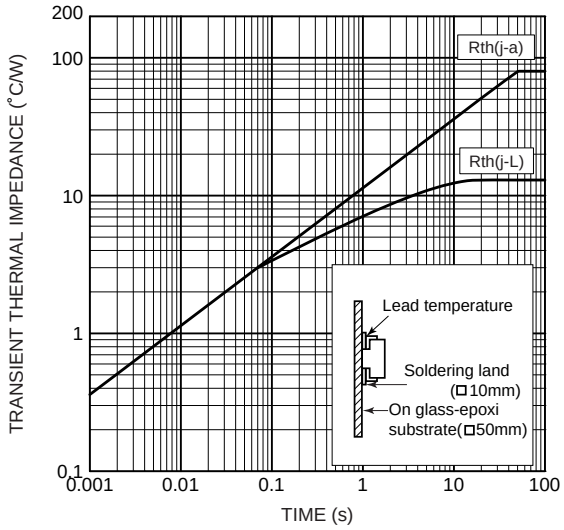
Typical zener characteristics (Vz:68~82V)



Typical reverse power characteristics
(Rectangular pulse non-repetitive)



Transient thermal impedance



Precautions for Safe Use and Notices

If semiconductor devices are handled inappropriate manner, failures may result.
For this reason, be sure to read “Precaution for Use” before use.

⚠ This mark indicates an item about which caution is required.

⚠ **CAUTION** This mark indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and damage to property.

⚠ CAUTION

(1) Regardless of changes in external conditions during use “absolute maximum ratings” should never be exceed in designing electronic circuits that employ semiconductors.In the case of pulse use, furthermore,″safe operating area(SOA)”precautions should be observed.

(2) Semiconductor devices may experience failures due to accident or unexpected surge voltages. Accordingly, adopt safe design features, such as redundancy or prevention of erroneous action, to avoid extensive damage in the event of a failure.

(3) In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, life-support-related medical equipment, fuel control equipment and various kinds of safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of user’s fail-safe precautions or other arrangement. Or consult Hitachi’s sales department staff.

(If a semiconductor device fails, there may be cases in which the semiconductor device, wiring or wiring pattern will emit smoke or cause a fire or in which the semiconductor device will burst)

NOTICES

1. This Datasheet contains the specifications, characteristics(in figures and tables), dimensions and handling notes concerning power semiconductor products (hereinafter called “products”) to aid in the selection of suitable products.
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http://www.hitachi-power-semiconductor-device.co.jp/en/