

# MZ55B200-SIZ

**V<sub>Z</sub> : 200 Volts**

**P<sub>D</sub> : 500 mW**

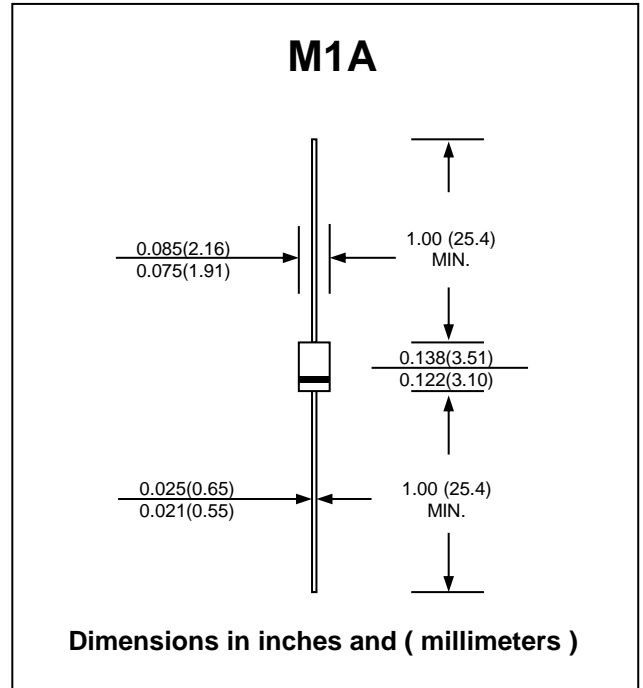
**FEATURES :**

- \* High surge current capability
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* Zener Voltage tolerance is ± 2%
- \* **Pb / RoHS Free**

**MECHANICAL DATA :**

- \* Case : M1A Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.20 gram (approximately)

## SILICON ZENER DIODE



**MAXIMUM RATINGS** ( Rating at 25 °C ambient temperature unless otherwise specified)

Rating	Symbol	Value	Unit
Power Dissipation (Note1)	P <sub>D</sub>	500	mW
Maximum Forward Voltage at I <sub>F</sub> =100 mA	V <sub>F</sub>	1.0	V
Maximum Thermal Resistance Junction to Ambient Air (Note1)	R <sub>θJA</sub>	300	°C/W
Junction Temperature	T <sub>J</sub>	175	°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175	°C

**ELECTRICAL CHARACTERISTICS** (Rating at 25 °C ambient temperature unless otherwise specified)

Type Number	Zener Voltage V <sub>Z</sub> @ I <sub>ZT</sub>			Maximum Zener Impedance					Max. Reverse Leakage Current		Temp. coefficient of Zener Voltage TK <sub>VZ</sub> (% / K)	Admissible Zener Current <sup>(3)</sup> I <sub>ZM</sub> (mA)
	Nom <sup>2)</sup> (V)	Min <sup>3)</sup> (V)	Max <sup>3)</sup> (V)	I <sub>ZT</sub> (μA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω)	I <sub>ZT</sub> (mA)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	at V <sub>R</sub> (V)		
<b>MZ55B200-SIZ</b>	200	196.0	204.0	20	3000	1.0	10000	0.5	1.0	150	0.05...0.12	2.0

**Notes:**

- (1) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.
- (2) Tested with pulses tp = 20 ms
- (3) Valid Provided that leads are kept at ambient temperature at a distance of 8 mm from case
- (4) For ± 5% tolerance altered the fifth letter of type from "B" to be "C"

RATING AND CHARACTERISTIC CURVES ( MZ55B200-SIZ )

FIG.1 - TOTAL POWER DISSIPATION VS. AMBIENT TEMPERATURE

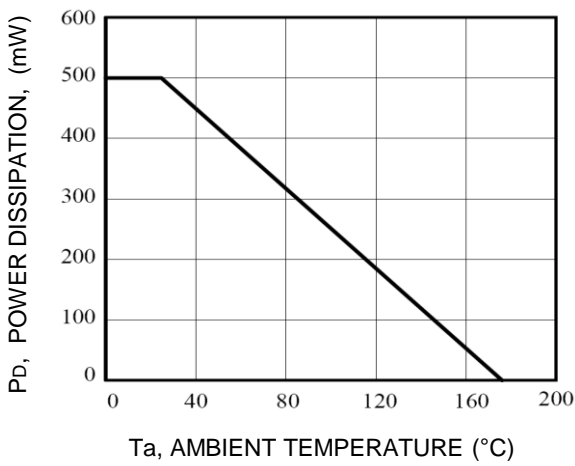


FIG.2 - TEMPERATURE COEFFICIENT OF Vz VS. ZENER VOLTAGE

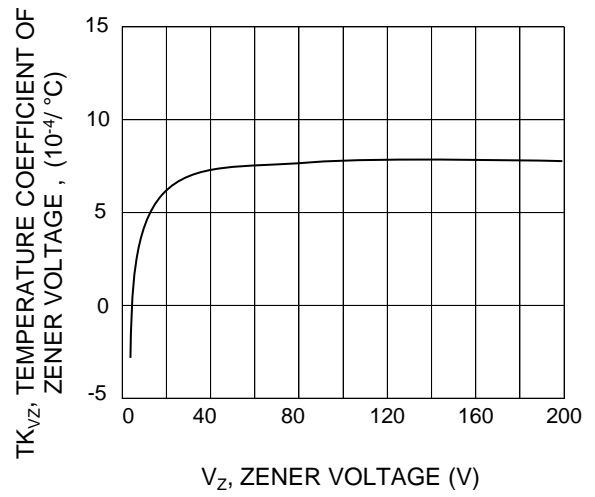


FIG. 3 - ZENER VOLTAGE VS. ZENER CURRENT

