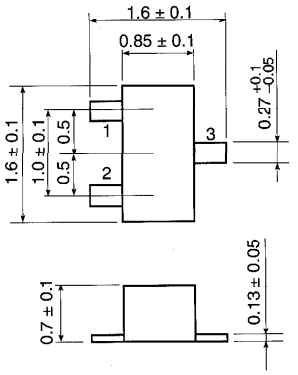
TOSHIBA DIODES FOR PROTECTING AGAINST ESD EPITAXIAL PLANAR TYPE

01ZA8.2

DIODES FOR PROTECTING AGAINST ESD

Unit in mm

- Because two devices are mounted on an ultra compact package, it is possible to allow reducing the number of the parts and the mounting cost.



1. CATHODE1
2. CATHODE2
3. ANODE

ESM	
JEDEC	—
EIAJ	—
TOSHIBA	1-2SA1A

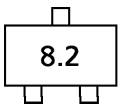
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P	100	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	−55~125	°C

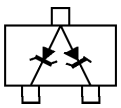
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Zener Voltage	V_Z	I_Z = 5mA	7.7	8.2	8.7	V
Dynamic Impedance	Z_Z	I_Z = 5mA	—	15	—	Ω
Knee Dynamic Impedance	Z_{ZK}	I_Z = 0.5mA	—	20	—	Ω
Reverse Current	I_R	V_R = 6.5V	—	—	0.5	μA

MARKING

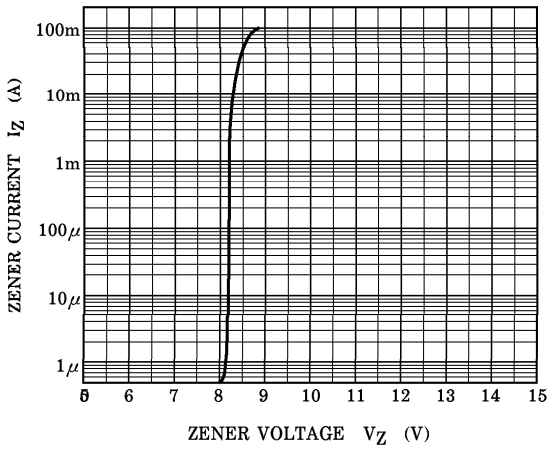


EQUIVALENT CIRCUIT (TOP VIEW)

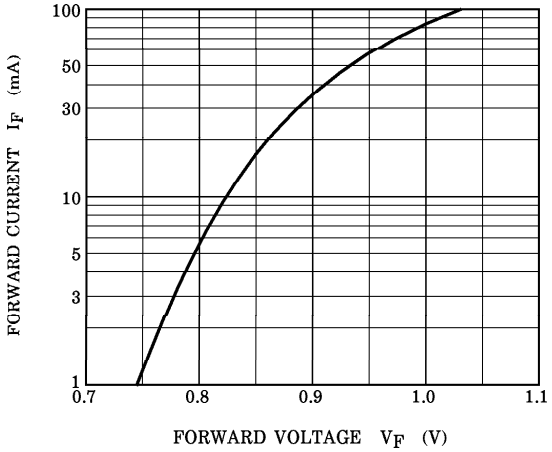


961001EAA1

$I_Z - V_Z$


100m
10m
1m
100μ
10μ
1μ
ZENER CURRENT I_Z (A)
5
6
7
8
9
10
11
12
13
14
15
ZENER VOLTAGE V_Z (V)

$I_F - V_F$


100
50
30
10
5
3
1
FORWARD CURRENT I_F (mA)
0.7
0.8
0.9
1.0
1.1
FORWARD VOLTAGE V_F (V)