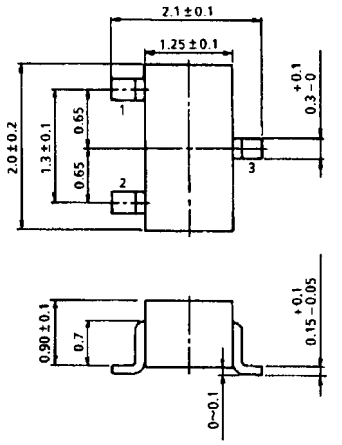
TOSHIBA Diodes For Protecting Against ESD Epitaxial Planar Type

DF3A6.8LFU

Diodes for Protecting Against ESD

Unit: 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.
- Zener voltage correspond to E24 Series.
- Low total capacitance: C_T = 6.0 pF (typ.)



USM

JEDEC	—
JEITA	—
TOSHIBA	1-2P1A

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Power dissipation	P	200	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55 to 125	°C

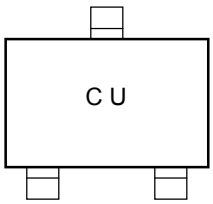
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Zener voltage	V_Z	I_Z = 5 mA	6.5	6.8	7.1	V
Dynamic impedance	Z_Z	I_Z = 5 mA	—	—	50	Ω
Knee dynamic impedance	Z_{ZK}	I_Z = 0.5 mA	—	—	100	Ω
Reverse current	I_R	V_R = 5 V	—	—	0.5	μA
Total capacitance	C_T	V_R = 0 V, f = 1 MHz	—	6.0	—	pF

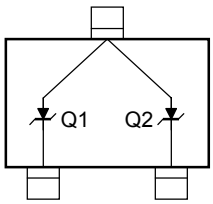
Guaranteed Level of ESD Immunity

Test Condition	ESD Immunity Level
IEC61000-4-2 (contact discharge)	±8 kV

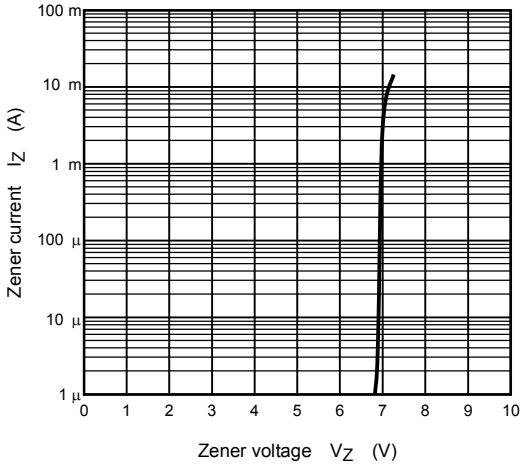
Marking



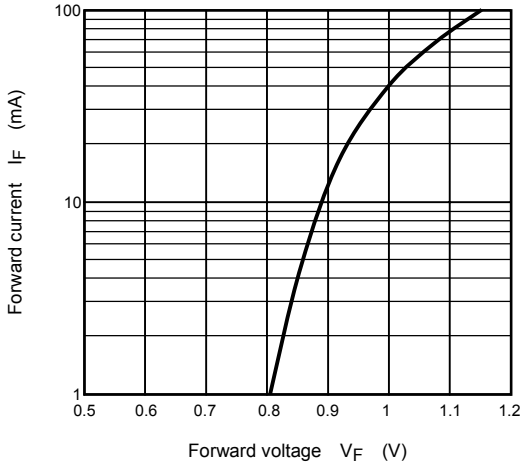
Equivalent Circuit (top view)



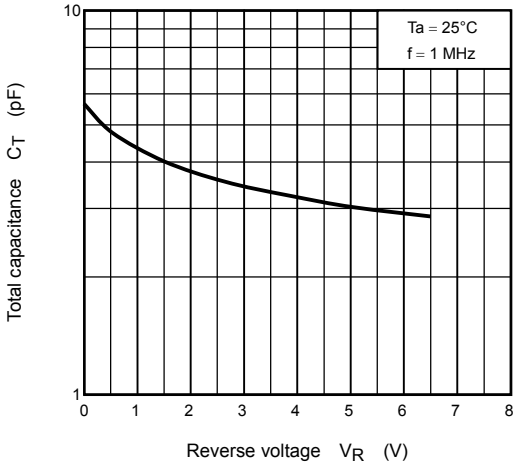
$I_Z - V_Z$



$I_F - V_F$



$C_T - V_R$



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