

TOSHIBA Diodes For Protecting Against ESD Epitaxial Planar Type

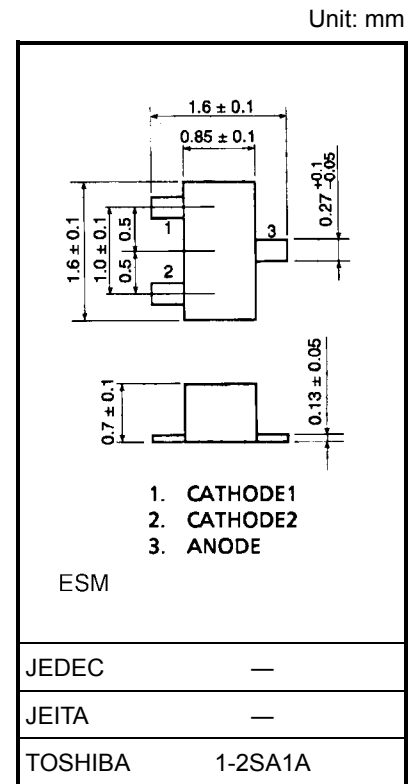
## DF3A6.8LFE

### Diodes for Protecting Against ESD

- 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.)

### Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Rating	Unit
Power dissipation	P	100	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to 125	$^\circ\text{C}$



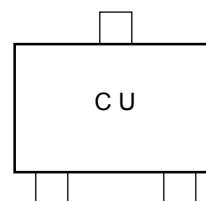
### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

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	$\Omega$
Knee dynamic impedance	$Z_{ZK}$	$I_Z = 0.5$ mA	—	—	100	$\Omega$
Reverse current	$I_R$	$V_R = 5$ V	—	—	0.5	$\mu\text{A}$
Total capacitance	$C_T$	$V_R = 0$ V, $f = 1$ MHz	—	6.0	—	pF

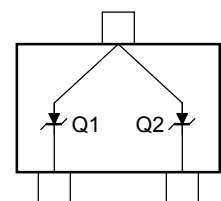
### Guaranteed Level of ESD Immunity

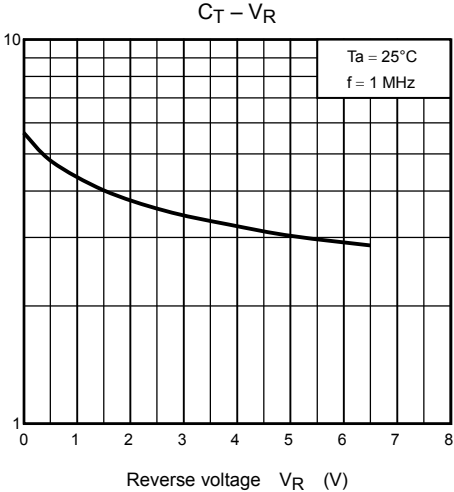
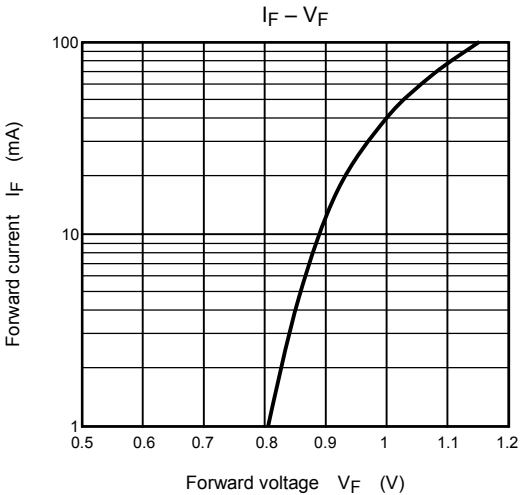
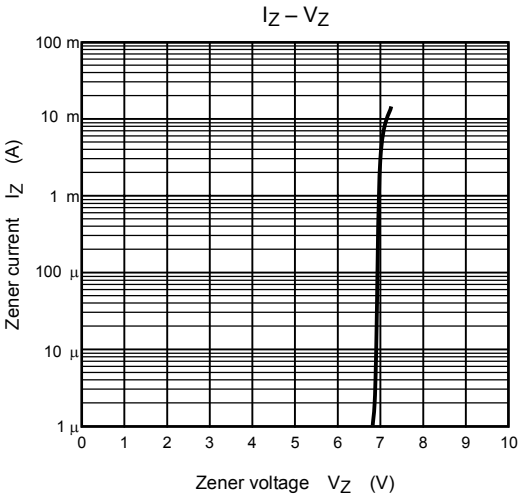
Test Condition	ESD Immunity Level
IEC61000-4-2 (contact discharge)	±8 kV

### Marking



### Equivalent Circuit (top view)





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