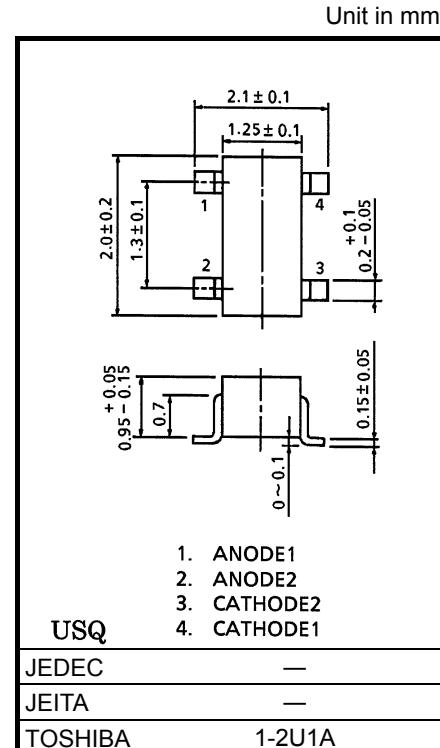


TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS402

High Speed Switching Applications

- Two independent diodes are mounted on four-pin ultra-small packages that are suitable for higher mounting densities.
- Low forward voltage : V_F (3) = 0.50V (typ.)
- Low reverse current : I_R = 0.5 μ A (max)
- Small total capacitance : C_T = 3.9pF (typ.)

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	25	V
Reverse voltage	V_R	20	V
Maximum (peak) forward current	I_{FM}	100 *	mA
Average forward current	I_O	50 *	mA
Surge Current (10ms)	I_{FSM}	1 *	A
Power dissipation	P	100 *	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55~125	°C

Weight: 0.006 g(typ.)

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

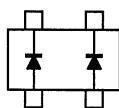
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc.).

*: Unit rating. Total rating = Unit rating \times 1.5

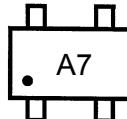
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

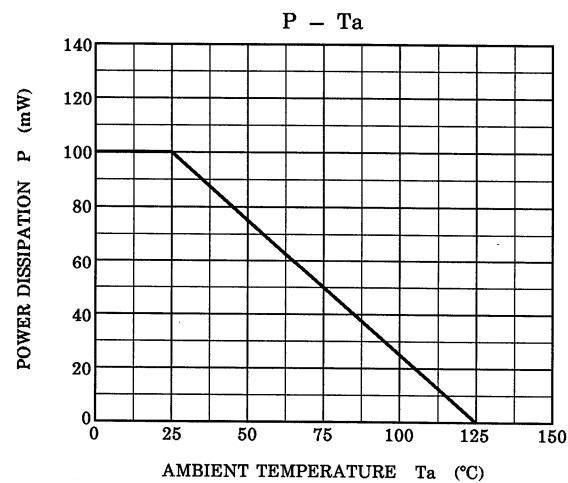
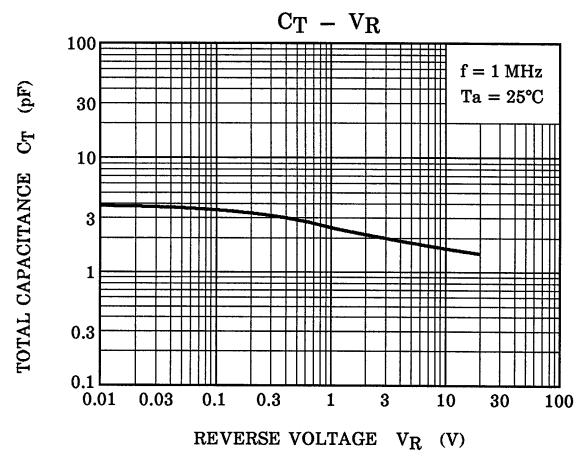
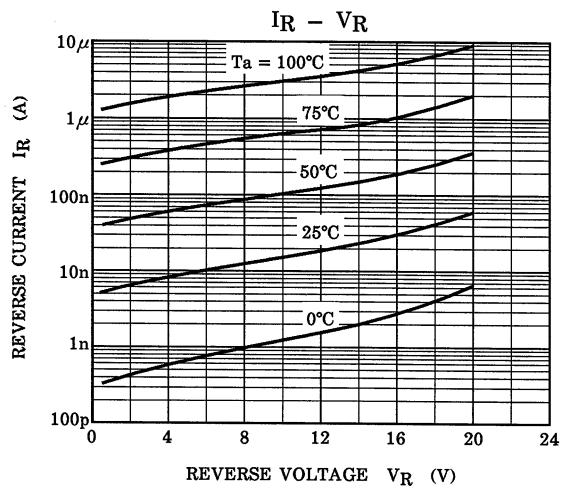
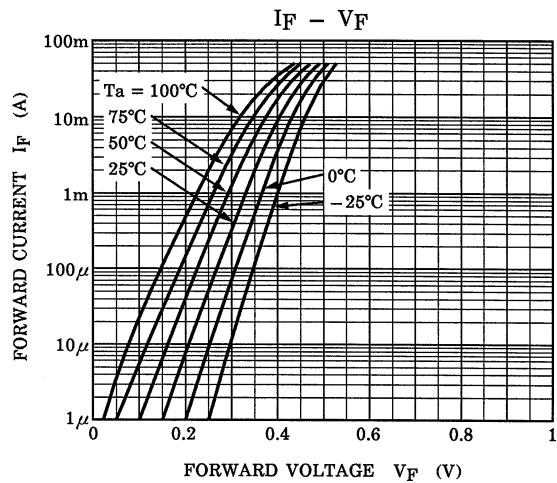
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F (1)	—	$I_F = 1\text{mA}$	—	0.33	—	V
	V_F (2)	—	$I_F = 5\text{mA}$	—	0.38	—	
	V_F (3)	—	$I_F = 50\text{mA}$	—	0.50	0.55	
Reverse current	I_R (1)	—	$V_R = 20\text{V}$	—	—	0.5	μA
Total capacitance	C_T	—	$V_R = 0, f = 1\text{MHz}$	—	3.9	5.0	pF

Pin Assignment (Top View)



Marking





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