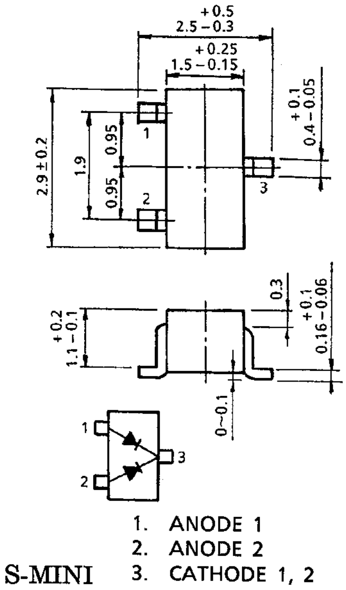
TOSHIBA Diode Silicon Epitaxial Planar Type

1SS321

Low Voltage High Speed Switching

- Low forward voltage : V_F = 0.42V (typ.)
- Low reverse current : I_R = 500nA (max)
- Small package : SC-59 (SOT-23MOD)

Unit: mm



JEDEC	SOT−23MOD
EIAJ	SC−59
TOSHIBA	1-3G1F

Weight: 0.012g

Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	12	V
Reverse voltage	V_R	10	V
Maximum (peak) forward current	I_{FM}	150 (*)	mA
Average forward current	I_O	50 (*)	mA
Surge current (10ms)	I_{FSM}	1000 (*)	mA
Power dissipation	P	150	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55~125	°C

(*) Unit rating. Total rating = unit rating × 1.5.

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_{F\ (1)}$	—	I_F = 1mA	—	0.32	—	V
	$V_{F\ (2)}$	—	I_F = 10mA	—	0.42	—	
	$V_{F\ (3)}$	—	I_F = 50mA	—	0.63	1.00	
Reverse current	I_R	—	V_R = 10V	—	—	500	nA
Total capacitance	C_T	—	V_R = 0, f = 1MHz	—	3.2	4.5	pF

Marking