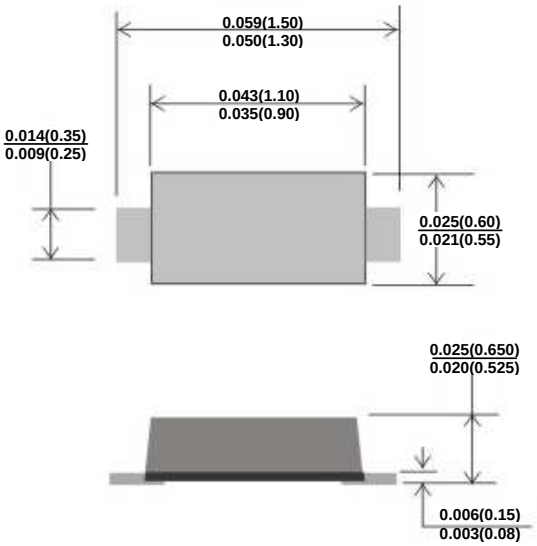
1SS400G

SURFACE MOUNT SWITCHING DIODE

High speed switching

SOD-723



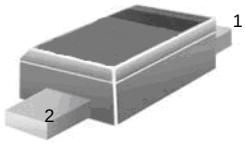
DIMENSIONS (mm are the original dimensions)

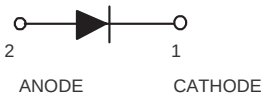
FEATURES

1) Extremely small surface mounting type.
2) High Speed.
3) High reliability.

MECHANICAL DATA

Case: JEDEC SOD-723, Molded plastic, Silicon epitaxial planar.
We declare that material of product compliance with RoHS requirements.
Terminals: Solderable per MIL-STD-750，Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Approx. Weight: 0.00077 ounce





MAXIMUM RATINGS T_J = 25°C UNLESS OTHERWISE NOTED

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V
Cuntinuous reverse voltage	V_R	80	V
Cuntinuous forward current	I_F	225	mA
Non-repetitive pake forward current, t=0.001ms, Square wave	I_{FSM}	4	A
Total power dissipation (note1)	P_{TOT}	200	mW
Thermal resistance, Junction to ambient	$R_{\theta JA}$	625	℃/W
Operating junction and Storage temperature range	Tstg	– 55 ~ +150	℃

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwis e specified.

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage (note 2)	I F=100mA	V_F	–	–	1.2	V
Reverse leakage current	VR=80V	I_R	–	–	0.1	μ A
Junction capacitance	0.5V dc bias , f=1MHz	C_D	–	0.7	3	pF
Reverse recovery time	I_F=10mA, I_R=10mA R_L =100 Ohms; measured at $I_R$rec=1mA	T_{RR}	–	–	4	ns

Note1: FR-5 Board 70x60x1 mm
Note2: Short duration puls test to avoid self-heating effect

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- Typical Forward Characteristics

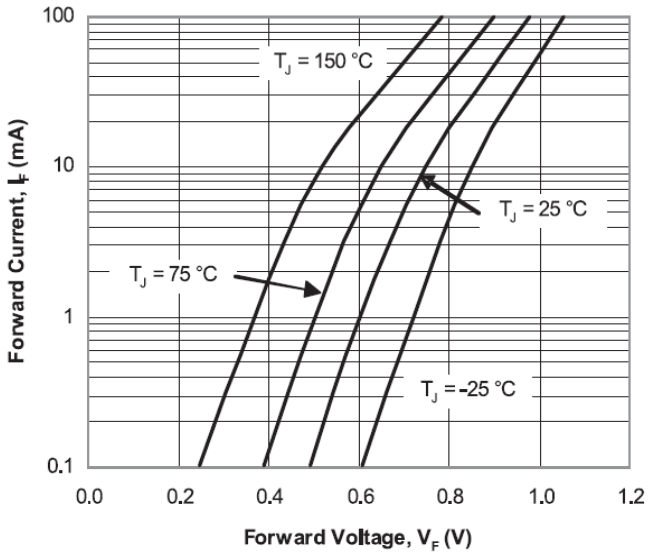


FIG. 2-Typical Reverse Characteristics

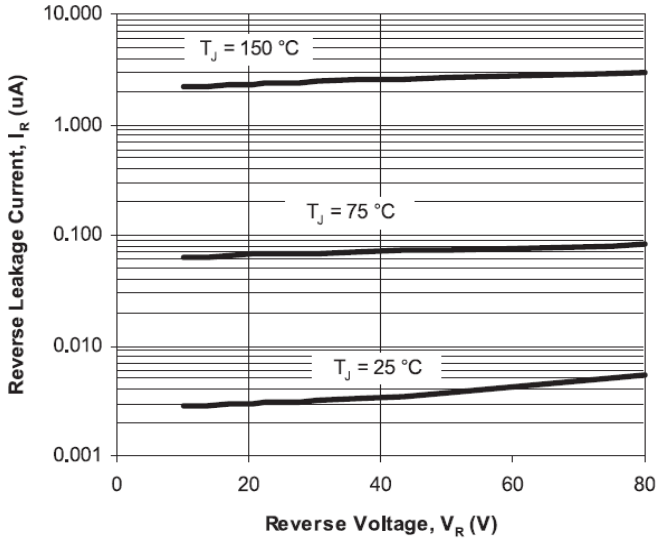


FIG. 3-Typical Capacitance Characteristics

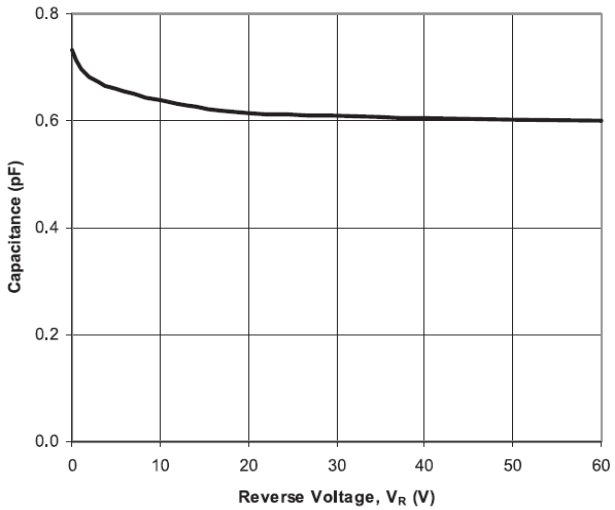
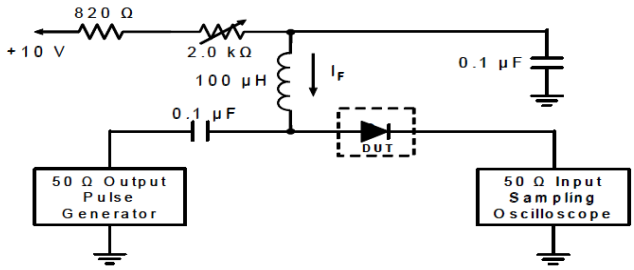


Figure 4. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT



Notes: 1. A 2.0kΩ variable resistor adjusted for a forward current (I_F) to 10mA
2. Input pulse is adjusted to $I_{R(peak)}$ is equal to 10mA

MOUNTING PAD LAYOUT

Unit: Inch(mm)