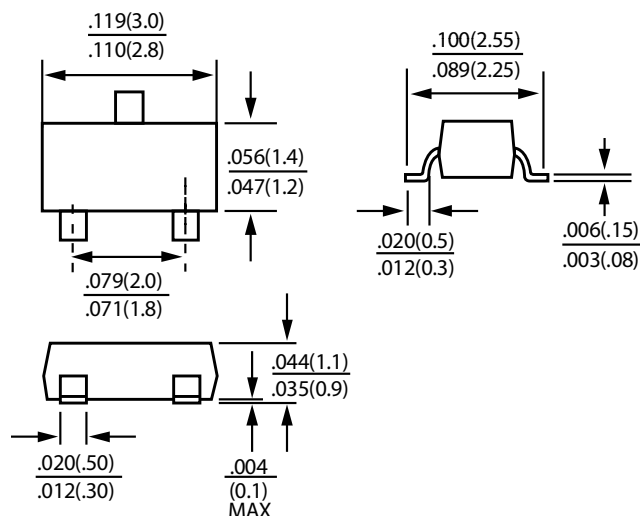




SOT-23

Dimensions in inches and (millimeters)

FEATURES

- We declare that the material of product compliance with RoHS requirements.
- RoHS product for packing code suffix "G"
- Hazlogen free product for packing code suffix "H"

Device Marking

1SS184 =B3

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum (peak) reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Maximum (peak) forward current	I_{FM}	300*	mA
Average forward current	I_O	100*	mA
Surge current (10ms)	I_{FSM}	2*	mA
Power dissipation	P	150	°C
Junction temperature	Tj	125	°C
Storage temperature range	Tstg	-55 ~ 125	°C

* : Unit rating. Total rating = Unit rating × 0.7.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Parameter	Symbol	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	0.6	-	V	$I_F=1mA$
	V_{F2}	0.72	-		$I_F=10mA$
	V_{F3}	0.9	1.2		$I_F=100mA$
Reverse current	I_{R1}	-	0.1	uA	$V_R=30V$
	I_{R2}	-	0.5		$V_R=80V$
Total capacitance	C_T	0.9	3	pF	$V_R=0, f=1MHz$
Reverse recovery time	trr	1.6	4	ns	$I_F=10mA$

Ultra High Speed Switching

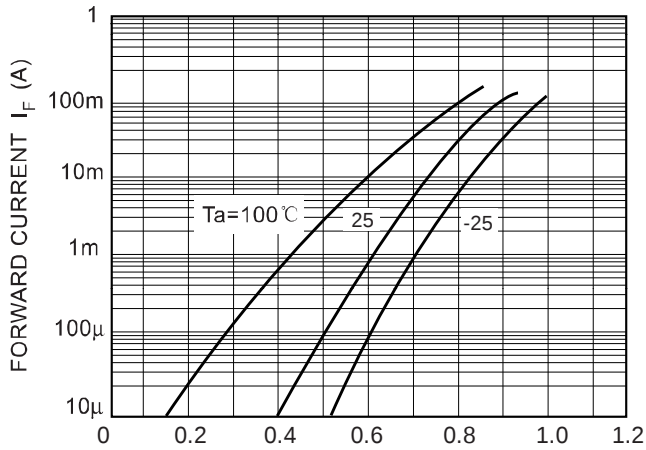


Fig.1 FORWARD VOLTAGE $V_F(V)$

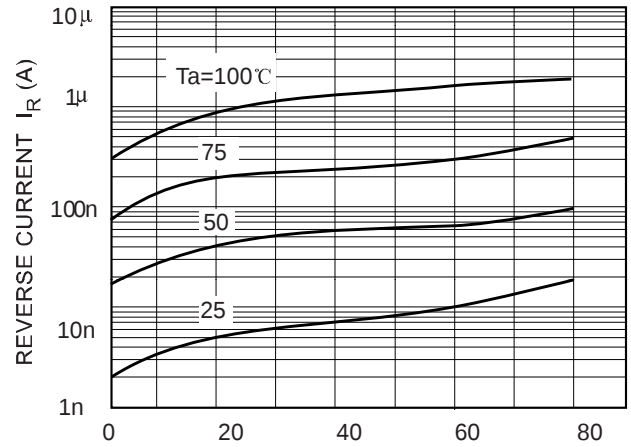


Fig.2 REVERSE VOLTAGE $V_R(V)$

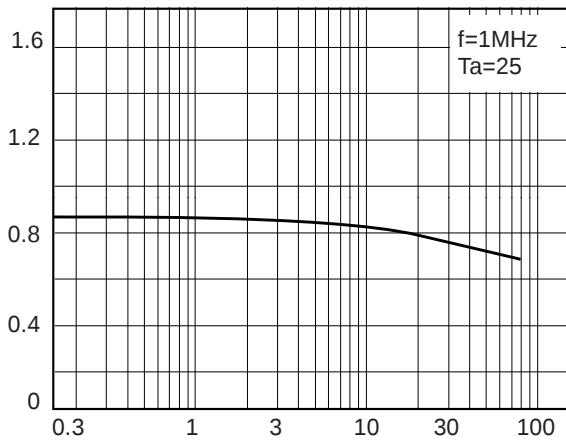


Fig.3 REVERSE VOLTAGE $V_R(V)$

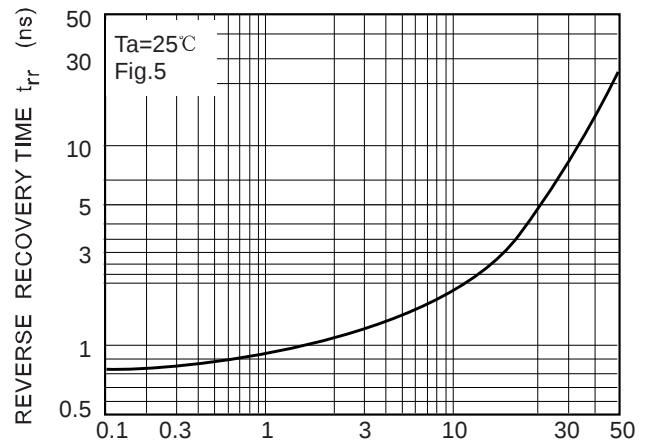


Fig.4 FORWARD CURRENT $I_F(\text{mA})$

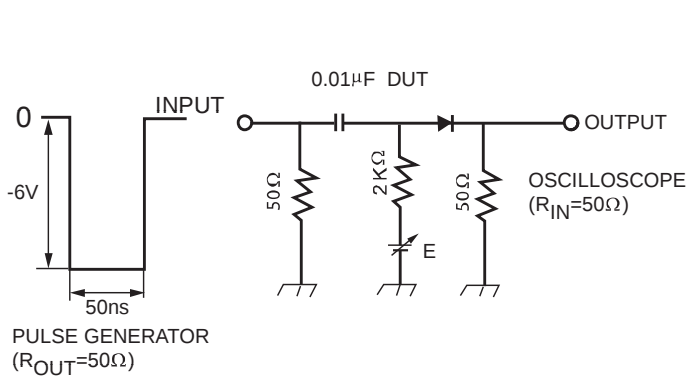


Fig.5 Reverse recovery time (t_{rr}) test circuit

