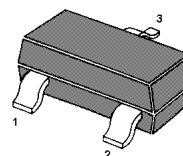
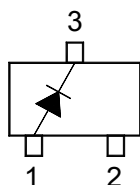


Features

- Very low forward voltage drop
- High conductance



SOT-23

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum DC Blocking Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	0.75	A
Non-repetitive Peak Forward Surge Current ($t = 8.3 \text{ ms}$)	I_{FSM}	5.5	A
Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	350	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 300 \mu\text{A}$	$V_{(BR)R}$	40	-	-	V
Forward Voltage at $I_F = 50 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 250 \text{ mA}$ at $I_F = 500 \text{ mA}$ at $I_F = 750 \text{ mA}$ at $I_F = 1 \text{ A}$ at $I_F = 1.5 \text{ A}$	V_F	- - - - - - -	- - - - - - -	280 310 350 420 490 540 650	mV
Reverse Current at $V_R = 30 \text{ V}$	I_R	-	-	100	μA
Total Capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_T	-	150	-	pF

Electrical Characteristic Curves

Fig 1. Average Rectified Current Derating Curve

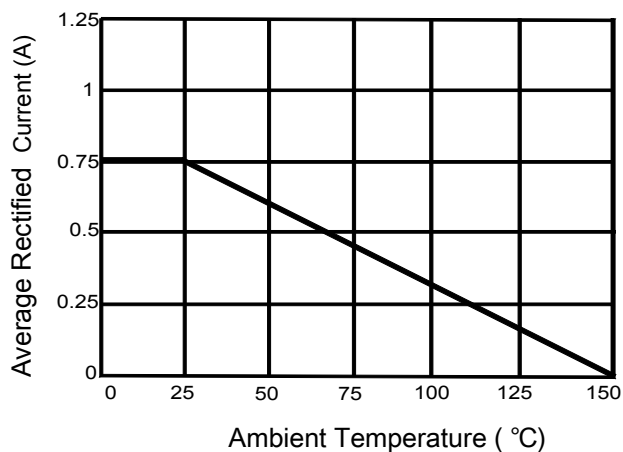


Fig 2. Forward Characteristic Curve

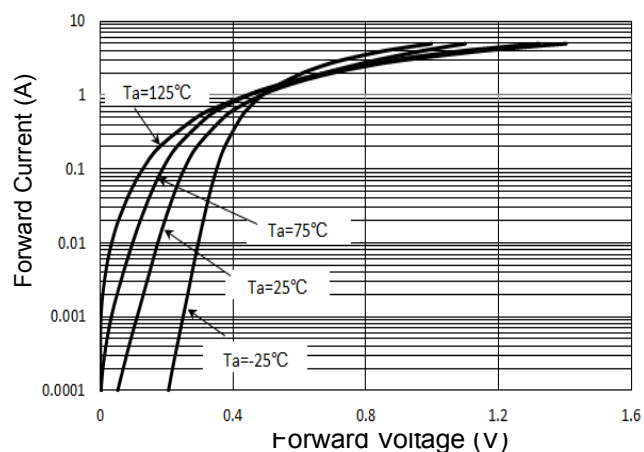


Fig 3. Reverse Characteristic Curve

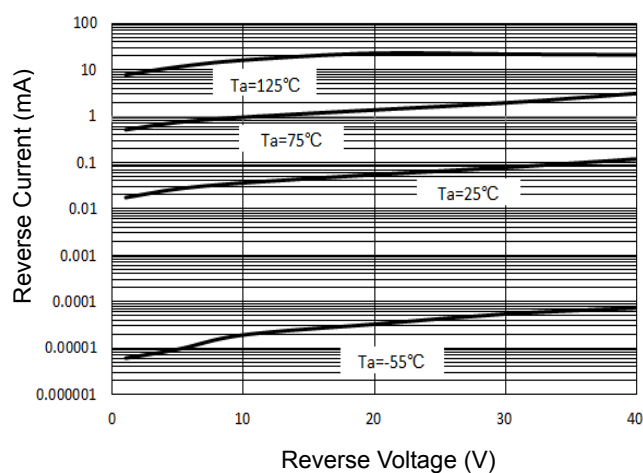
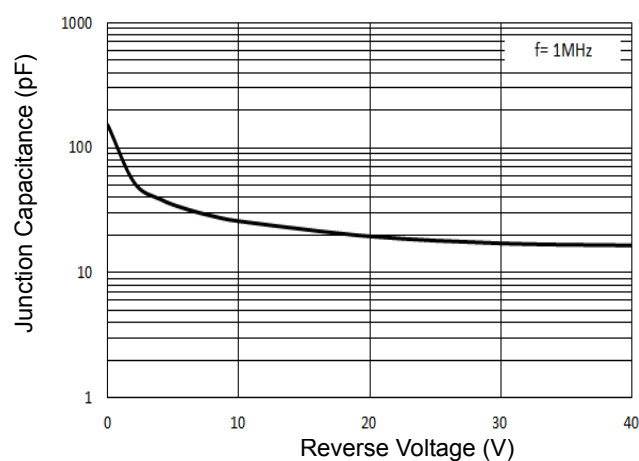
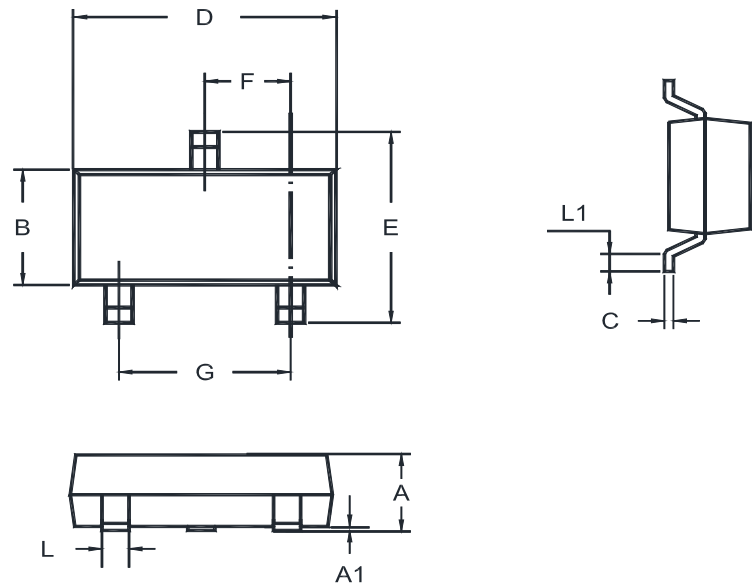


Fig 4. Junction Capacitance



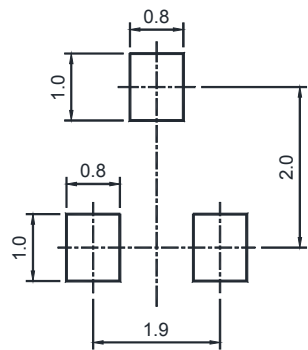
Package Outline (Dimensions in mm)

SOT-23



Unit	A	A1	B	C	D	E	F	G	L	L1
mm	1.20 0.89	0.100 0.013	1.40 1.20	0.19 0.08	3.04 2.80	2.6 2.2	1.02 0.89	2.04 1.78	0.51 0.37	0.2 MIN

Recommended Soldering Footprint



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