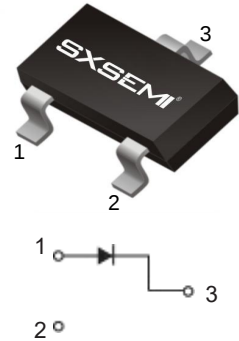


SOT-23

MARKING: D3A
FEATURES

- I Small surface mounting type
- I Low reverse current and low forward voltage
- I High reliability

Maximum Ratings @Ta=25°C

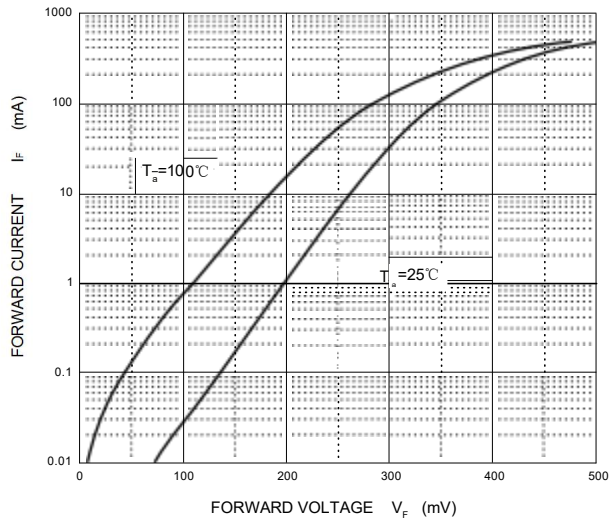
Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	40	V
DC reverse	V_R	40	V
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	3	A
Mean rectifying current	I_o	0.5	A
Power dissipation	P_D	250	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	400	°C/W
Operating Junction Temperature Range	T_j	-40 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Electrical Ratings (Ta=25°C unless otherwise specified)

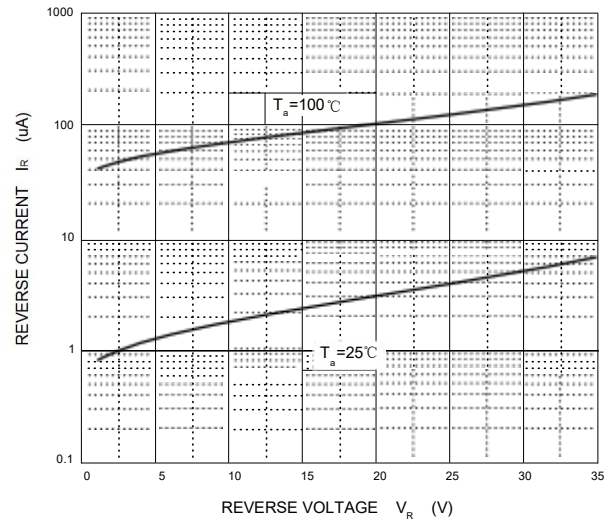
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V_R	40			V	$I_R=100\mu A$
Forward voltage	V_F			0.55	V	$I_F=0.5A$
Reverse current	I_{R1}			50	μA	$V_R=30V$
	I_{R2}			30	μA	$V_R=10V$
Capacitance between terminals	C_{T1}		125		pF	$V_R=0V, f=1MHz$
	C_{T2}		20		pF	$V_R=10V, f=1MHz$

Typical Characteristics

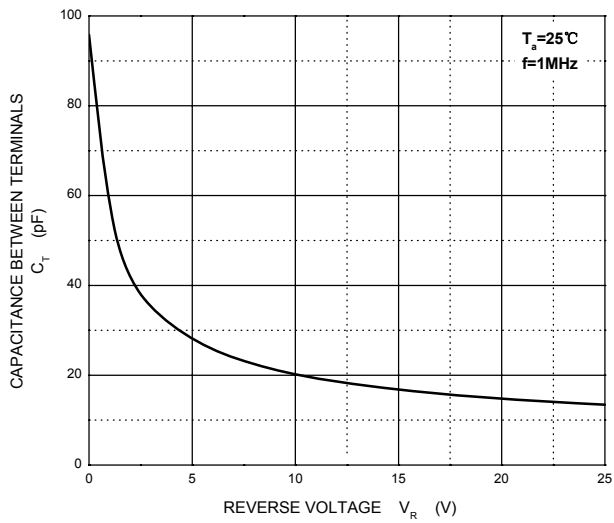
Forward Characteristics



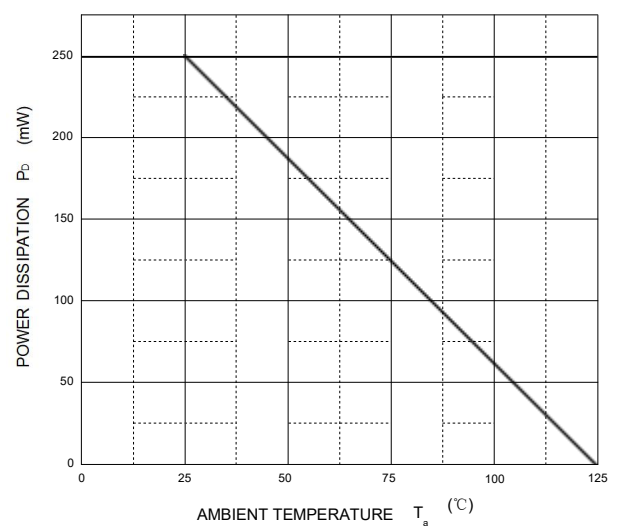
Reverse Characteristics



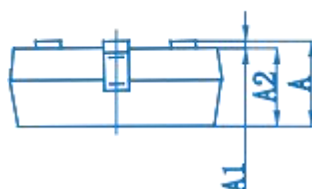
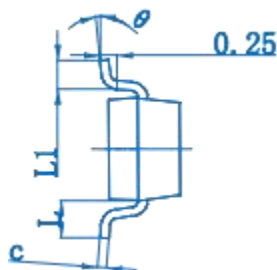
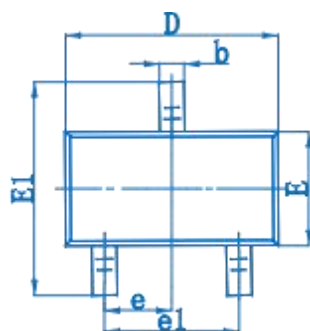
Capacitance Characteristics



Power Derating Curve

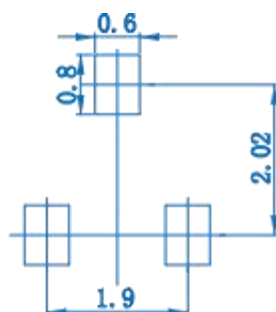


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension; in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.