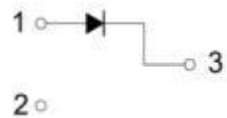
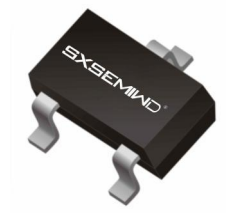


SOT-23

Marking: D3E
FEATURES

Small Surface Mounting Type

Low Reverse Current and Low Forward Voltage

High Reliability

Maximum Ratings(Ta=25℃ unless otherwise noted)

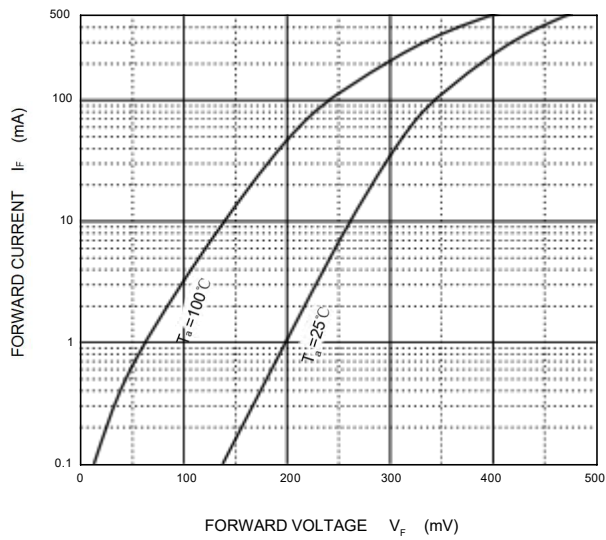
Parameter	Symbol	Limit	Unit
Peak repetitive reverse voltage	V_{RM}	40	V
RMS reverse voltage	$V_{R(RMS)}$	28	V
DC reverse voltage	V_R	20	V
Mean rectifying output current	I_O	500	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	3	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	℃/W
Operating Junction Temperature Range	T_j	-40 ~ +125	℃
Storage Temperature Range	T_{stg}	-55 ~ +150	℃

Electrical Ratings @Ta=25℃

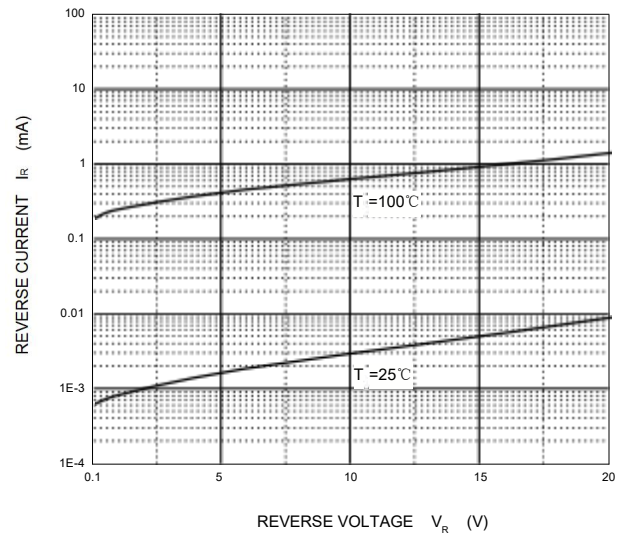
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse breakdown voltage	V_R	20			V	$I_R=100\mu A$
Forward voltage	V_{F1}			0.3	V	$I_F=10mA$
	V_{F2}			0.5	V	$I_F=500mA$
Reverse current	I_R			30	μA	$V_R=10V$
Capacitance between terminals	C_T		20		pF	$V_R=10V, f=1MHz$

Typical Characteristics

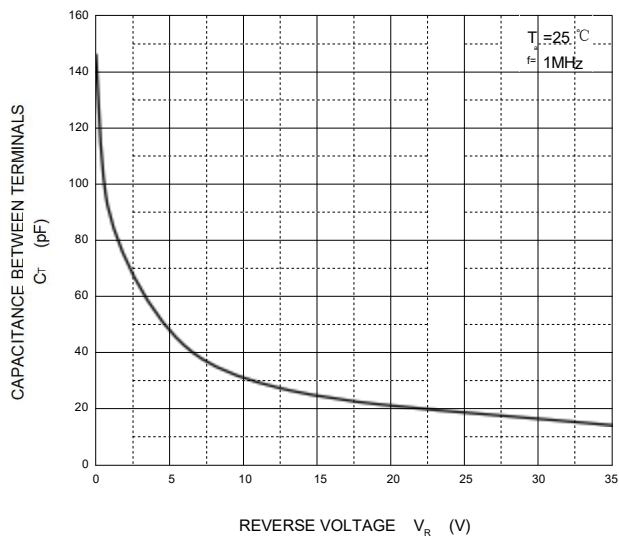
Forward Characteristics



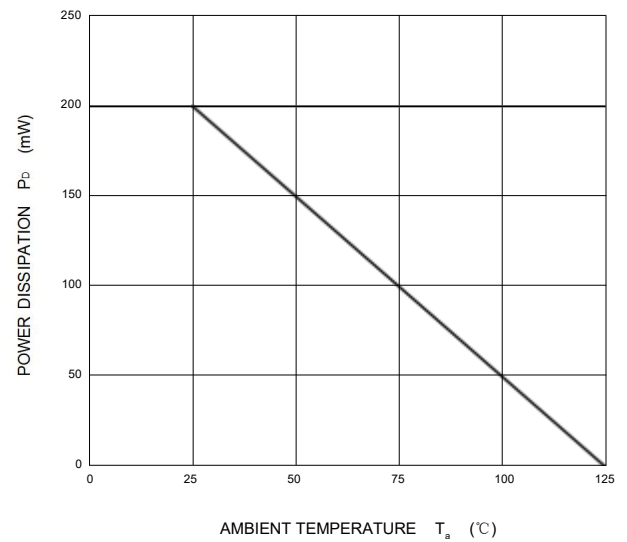
Reverse Characteristics



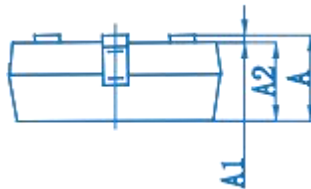
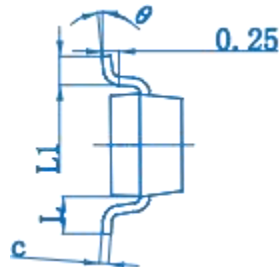
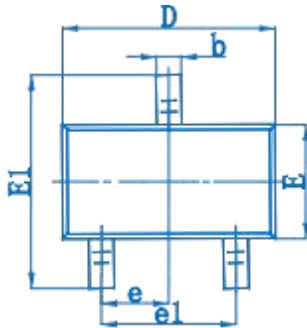
Capacitance Characteristics



Power Derating Curve

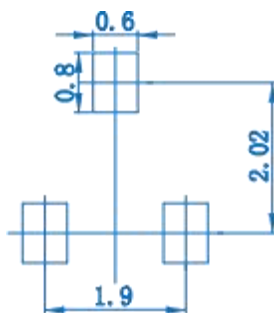


SOT-23 Package Outline Dimensions



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.