

## SOT-23 Plastic-Encapsulate Switching Diodes

### Features

- Very Low Leakage Current
- Low Reverse Recovery Time
- Halogen-free Package
- Surface Mount Package
- Epoxy UL: 94V-0



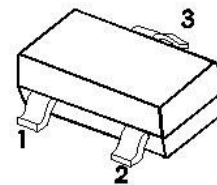
Marking: C3

SOT-23

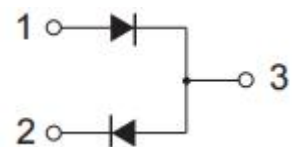
### Mechanical Data

- Low Leakage Current Applications
- High Speed Switch Applications

Pin definition



Equivalent circuit



### Maximum Ratings & Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V <sub>RM</sub>	85	V
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	80	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	80	V
DC Reverse Voltage	V <sub>R</sub>	80	V
Non-repetitive Peak Forward Current	I <sub>FM</sub>	300	mA
Average Rectified Current	I <sub>O</sub>	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>D</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C
Thermal Resistance Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	833	°C/W

### Electrical Specifications (T<sub>A</sub>=25°C unless otherwise noted)

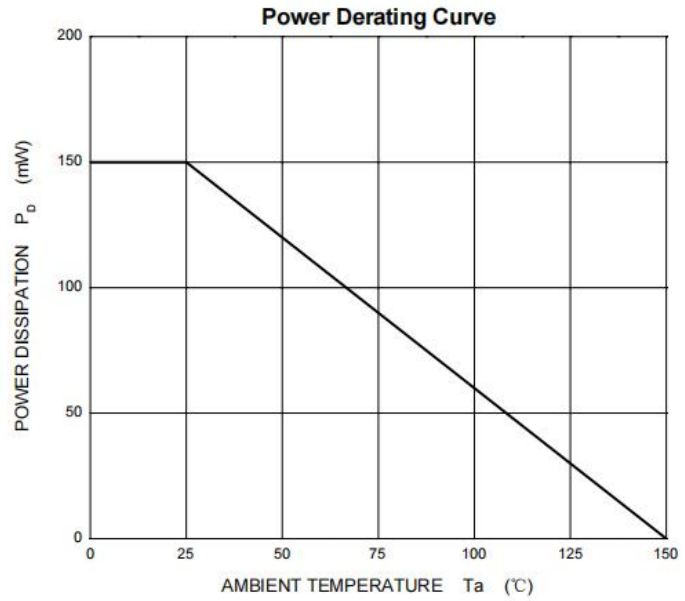
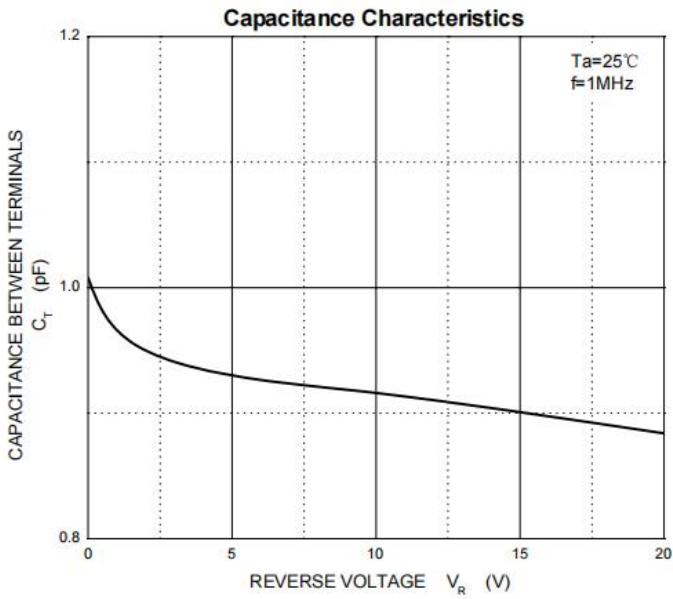
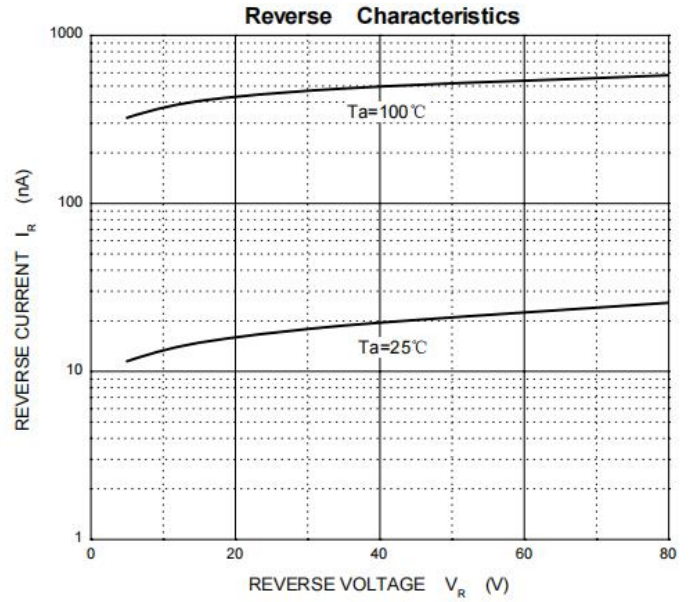
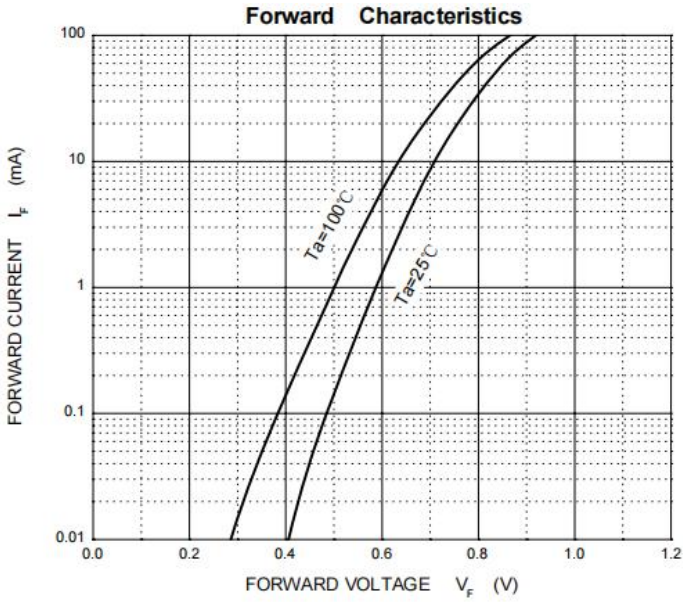
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 3)	V <sub>(BR)</sub>	I <sub>R</sub> = 100uA	80			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 100mA			1.2	V
Leakage Current (Note 3)	I <sub>R</sub>	V <sub>R</sub> = 80V			0.5	uA
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> = 0, f = 1.0MHz			3	pF
Reverse Recovery Time	T <sub>RR</sub>	I <sub>F</sub> = 10mA			4	nS

#### Notes :

1. Device mounted on FR-4 PC board with recommended pad layout.
2. No purposefully added lead.
3. Short duration test pulse used to minimize self-heating effect.

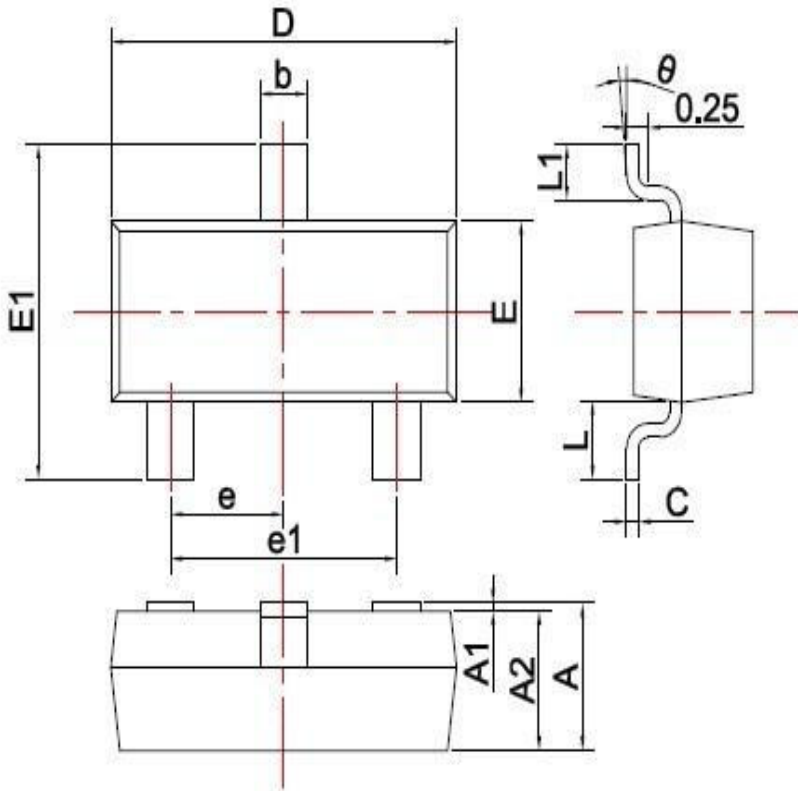
## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)



## Package Outline Dimensions

millimeters



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

## Revision History

Document Version	Date of release	Description of changes
Rev.A	2022.05.10	First issue

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