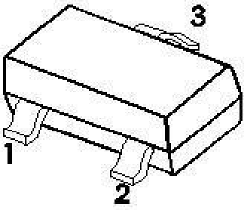
SOT-23 贴片塑封肖特基二极管

SOT-23

SOT-23 Plastic-Encapsulate Schottky Barrier Diode



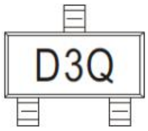
特征 Features

- 小型表贴封装。Small Surface Mounting Type
- 正向压降低。Low Forwaroltage Drop
- 开关速度快。Extremely Fast Switching Speed

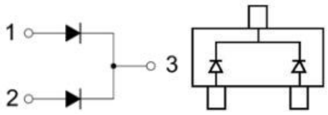
机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

MARKING: D3Q



Internal Structure:



极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	VR	40	V
反向峰值电压 Peak Repetitive Reverse Voltage	VRRM	40	V
功率消耗 Power Dissipation	Pd	250	mW
典型热阻 Typical thermal resistance	RθJA	400	℃/W
结温 Junction Temperature	Tj	125	℃
存储温度 Storage temperature range	TSTG	-55-+150	℃
正向连续电流 Continuous Forward Current	Io	400	mA
8.3ms峰值正向不重复浪涌电流 Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	IFSM	2	A

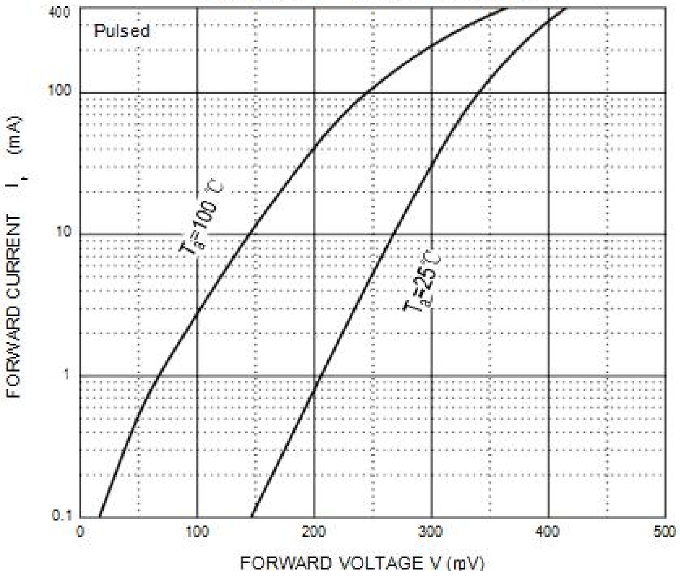
电特性 (TA = 25℃ 除非另有规定)

Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

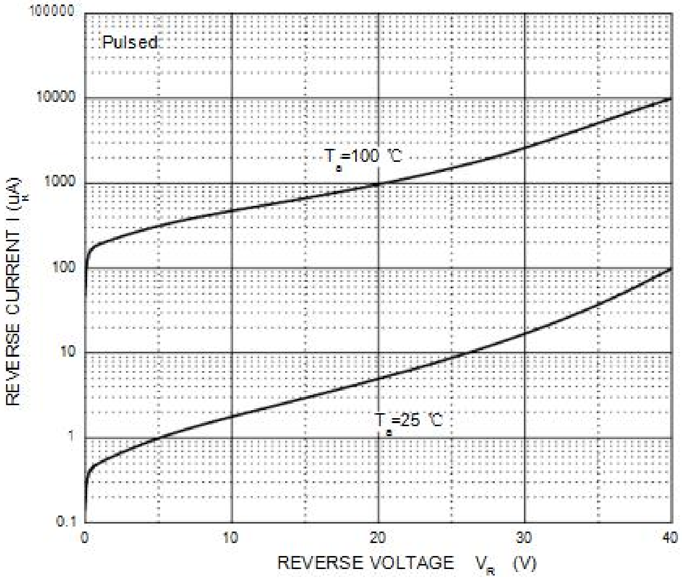
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V(BR)	反向电压 Reverse Voltage	IR=100uA	25		V
IR	反向漏电电流 Reverse Leakage Current	VR=25V	---	70	uA
VF	正向电压 Forward Voltage	IF=10mA	---	0.3	V
		IF=200mA	---	0.5	

Typical Characteristics

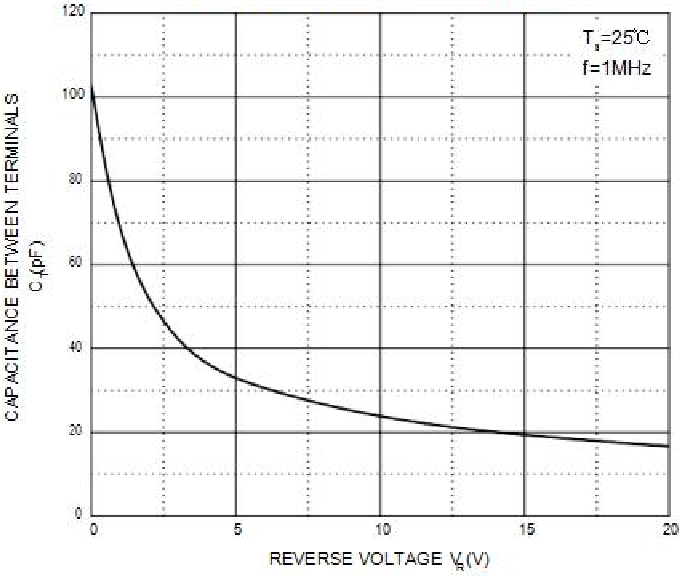
Forward Characteristics



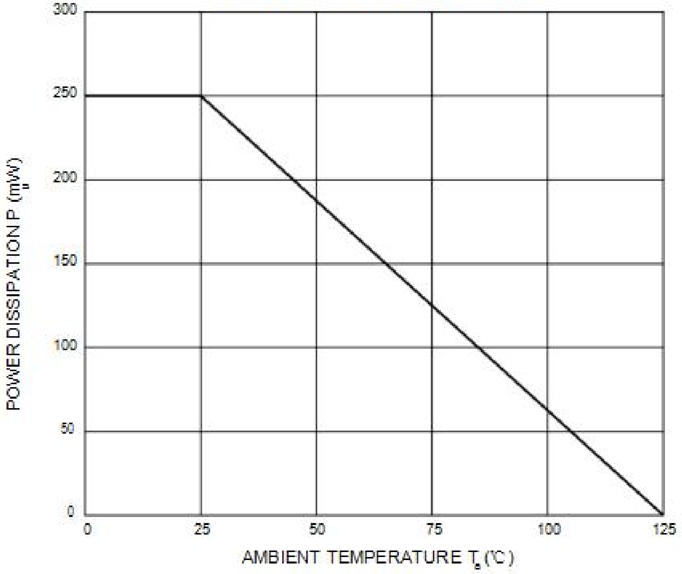
Reverse Characteristics



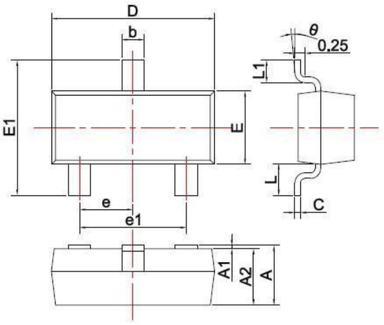
Capacitance Characteristics



Power Derating Curve



SOT-23 PACKAGE OUTLINE Plastic surface mounted package



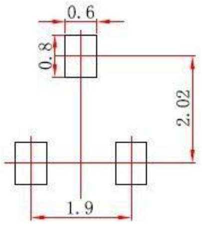
SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

焊盘设计参考

Precautions: PCB Design

Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.