

SCHOTTKY BARRIER DIODE

VOLTAGE RANGE: 40V PEAK PULSE POWER:250mW

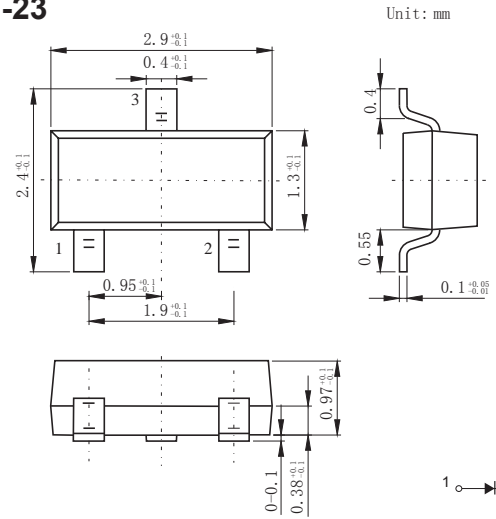
FEATURES

- Extremely Fast Switching Speed
- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

SOT-23



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

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
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55~+150	°C

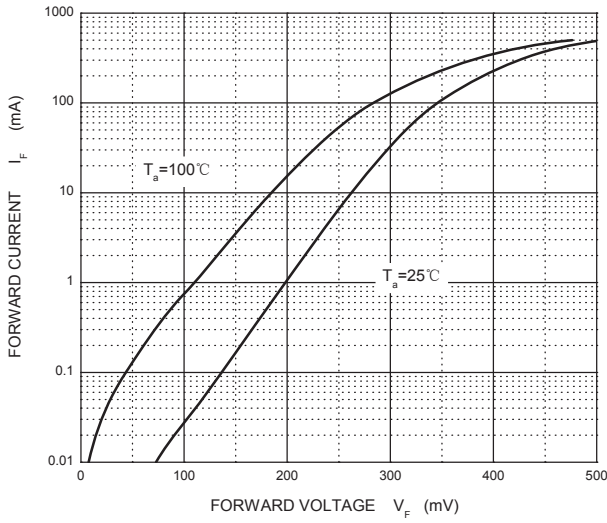
Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

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

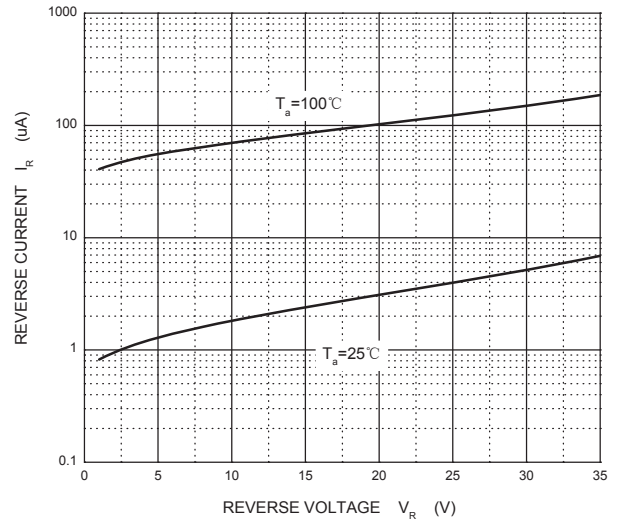
MARKING: D3A

RATINGS AND CHARACTERISTIC CURVES

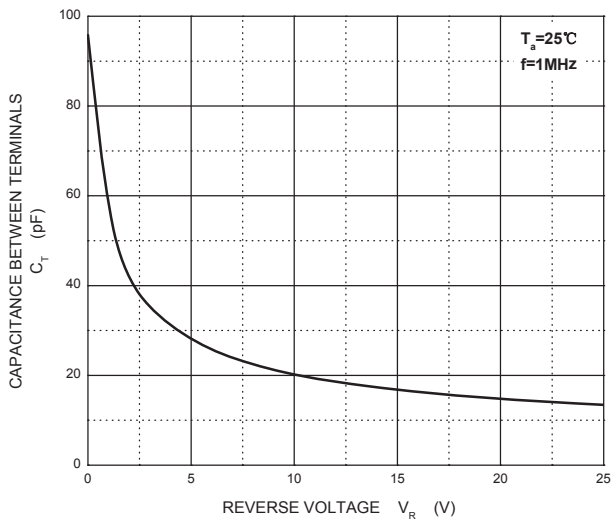
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

