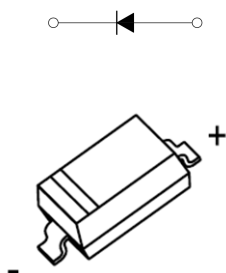


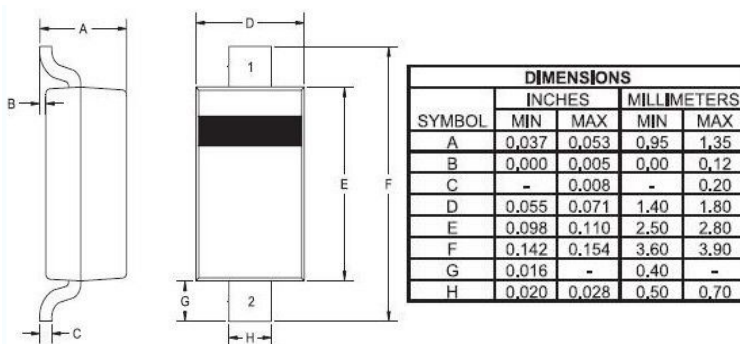
FEATURES

High breakdown voltage
Low turn-on voltage
Guard ring construction for transient protection



SOD-123

SOD123



Maximum Ratings @T_a=25°C

Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage	V _{RRM}	100	V
Working peak reverse voltage	V _{RWM}		
Forward continuous current	I _F	150	mA
Repetitive peak forward current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	I _{FRM}	350	mA
Non-repetitive Peak Forward surge current @ t = 8.3ms	I _{FSM}	750	mA
Power dissipation	P _D	500	mW
Thermal resistance junction to ambient air	R _{θJA}	200	°C/W
Junction temperature	T _j	125	°C
Storage temperature	T _{STG}	-55~+150	°C

BA T46W

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

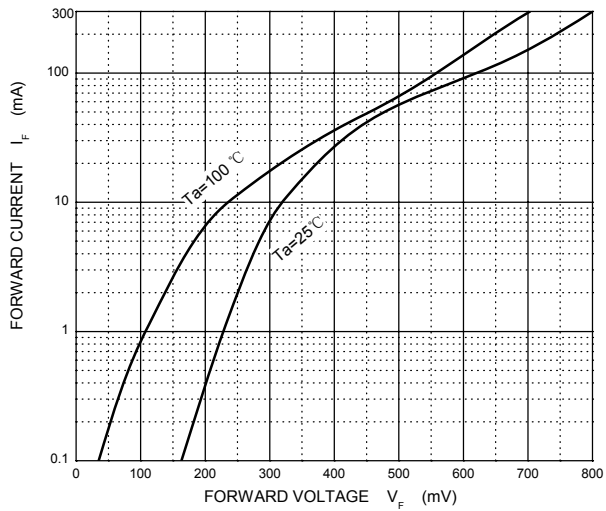
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage(Note 2)	V_R	$I_R=100\mu A$	100			V
Reverse voltage leakage current	I_R	$V_{R1}=1.5V$			0.3	μA
		$V_{R2}=10V$			0.5	
		$V_{R3}=50V$			1	
		$V_{R4}=75V$			2	
Forward voltage(Note 2)	V_F	$I_{F1}=0.1mA$			0.25	V
		$I_{F2}=10mA$			0.45	
		$I_{F3}=250mA$			1	
Diode capacitance	C_T	$V_R=0, f=1MHz$		20		pF
		$V_R=1V, f=1MHz$		12		

Notes: 1. Part mounted on FR-4 board with recommended pad layout.

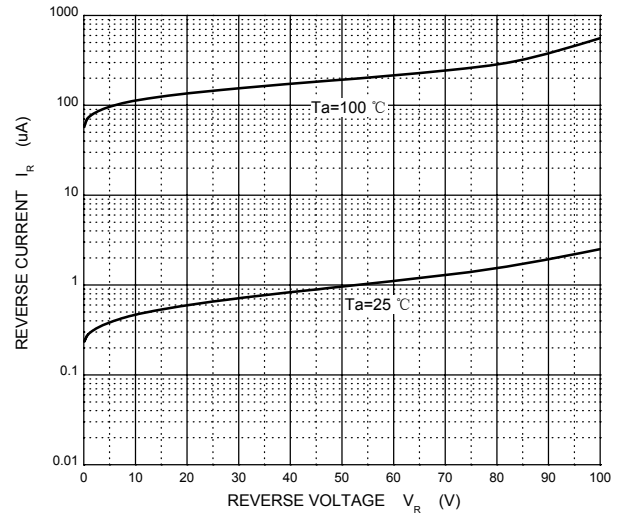
2. Short duration pulse test used to minimize self-heating effect.

RATING AND CHARACTERISTIC CURVES (BAT46W)

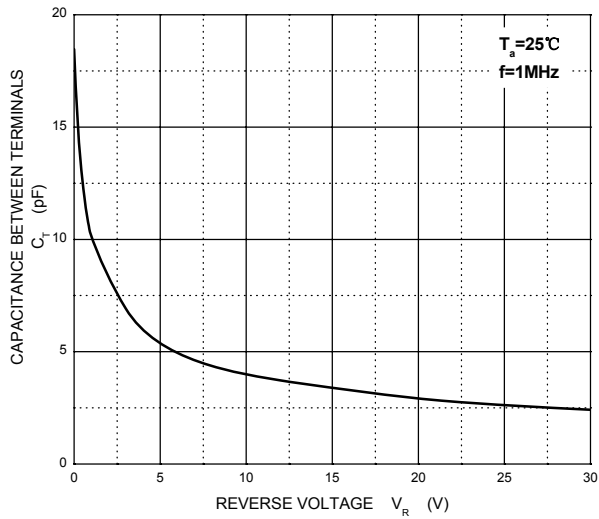
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

