

SOD-523 Plastic-Encapsulate Diodes

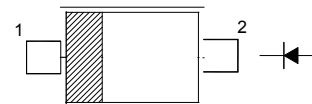
BAT54X Schottky Barrier Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage



Top View
Simplified outline SOD-523 and symbol

MARKING: JV

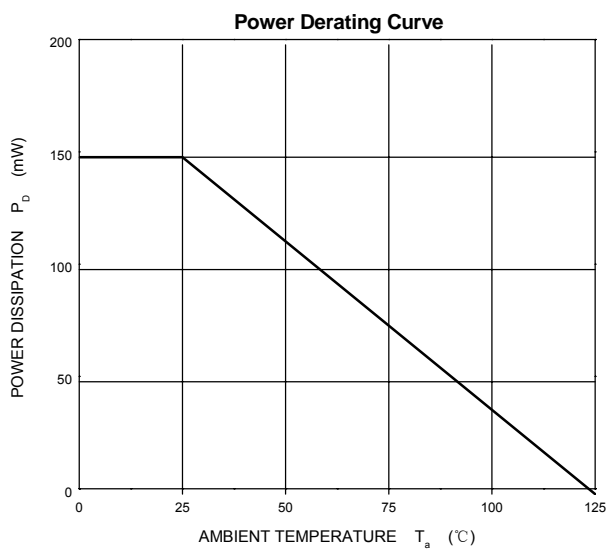
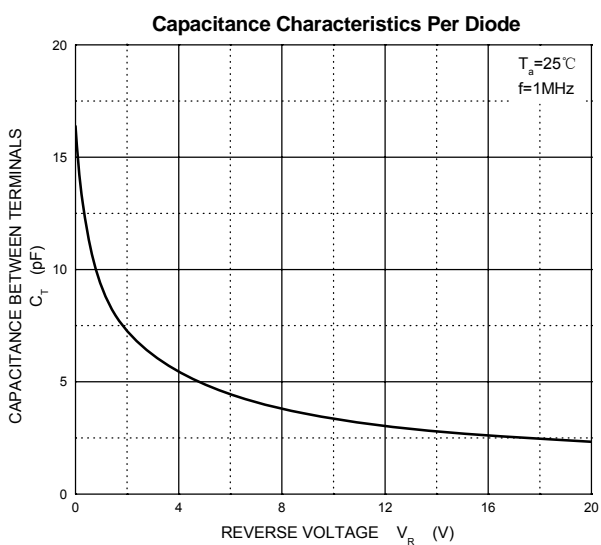
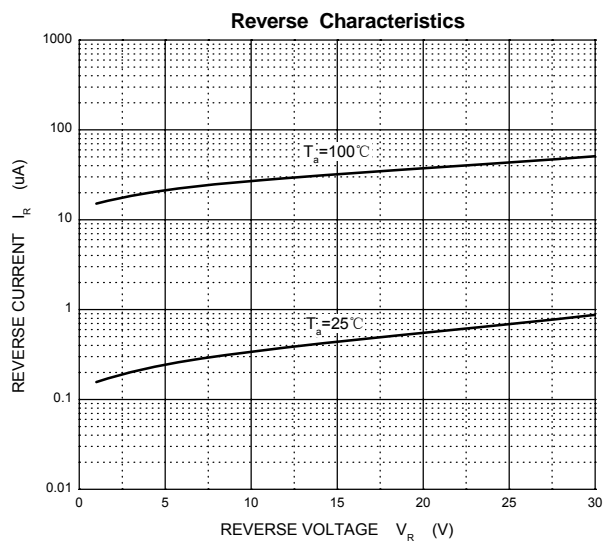
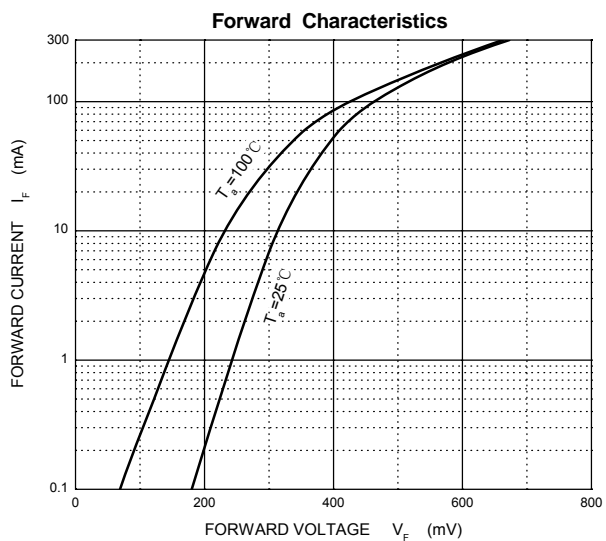
Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-repetitive peak reverse voltage	V_{RM}	30	V
DC blocking voltage	V_R	21	V
Average rectified output current	I_O	100	mA
Forward continuous current	I_F	200	mA
Repetitive peak forward current	I_{FRM}	300	mA
Peak Forward Surge Current (t= 10 ms)	I_{FSM}	600	mA
Power dissipation	P_d	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	667	°C/W
Junction temperature	T_J	125	°C
Storage temperature range	T_{STG}	-55~+150	°C

Electrical Characteristics @Ta=25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Forward voltage	V_{F1}	$I_F=0.1mA$			240	mV
	V_{F2}	$I_F=1.0mA$			320	mV
	V_{F3}	$I_F=10mA$			400	mV
	V_{F4}	$I_F=30mA$			500	mV
	V_{F5}	$I_F=100mA$			1000	mV
Reverse current	I_R	$V_R=25V$			2.0	uA
Reverse recovery time	t_{rr}	$I_F=10mA, I_R=10mA$ to 1mA , $R_L=100\Omega$			5.0	ns
Capacitance between terminals	C_T	$V_R=1V, f=1MHz$			10	pF

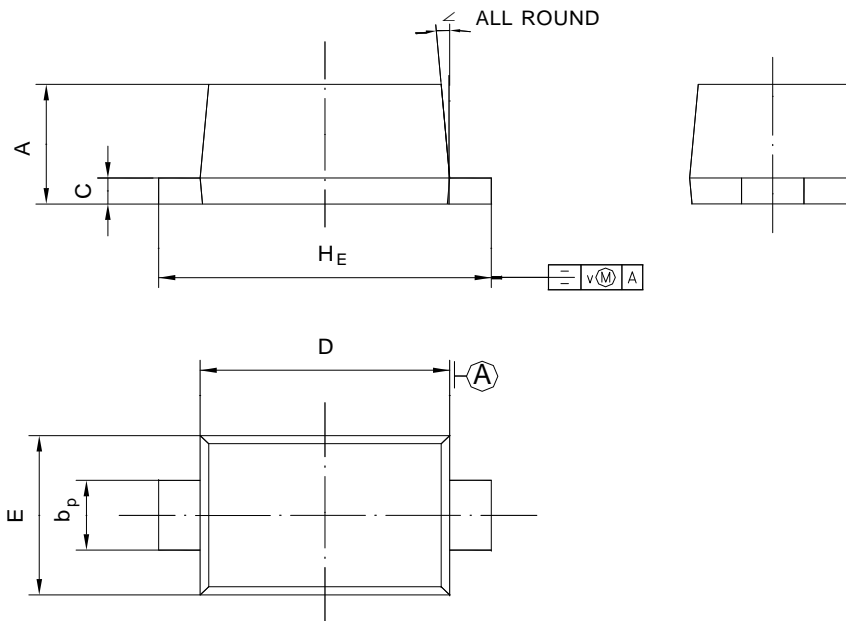
Typical Characteristics



PACKAGE OUTLINE

SOD-523

Plastic surface mounted package; 2 leads



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70	0.4	0.135	1.25	0.85	1.7	0.1	5°
	0.60	0.3	0.100	1.15	0.75	1.5		