

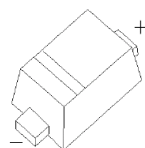


FEATURES

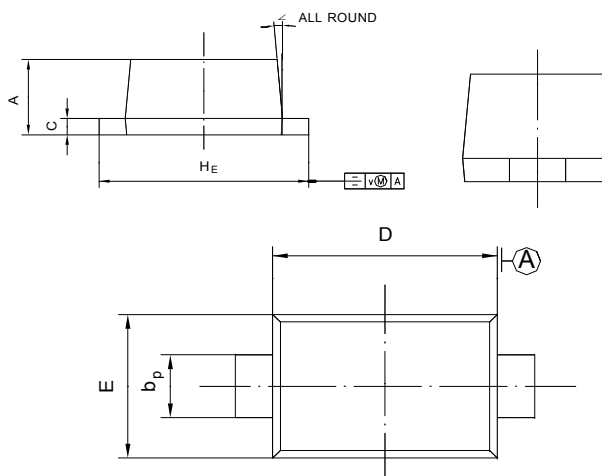
Extremely Fast Switching Speed

Low Forward Voltage

MARKING: JV



SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°

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
Non-repetitive Peak Forward surge current @t=8.3ms	I _{FSM}	600	mA
Power dissipation	P _d	150	mW
Thermal resistance junction to ambient	R _{θJA}	667	°C/W
Junction temperature	T _J	125	°C
Storage temperature range	T _{STG}	-55~+150	°C

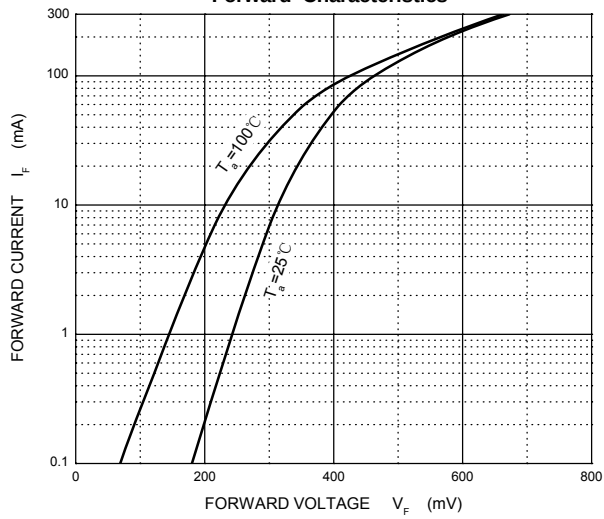
BAT54X

Electrical Characteristics @Ta=25°C

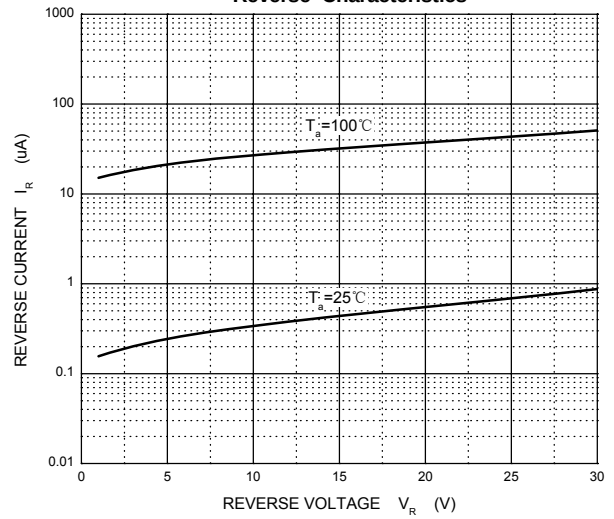
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Forward voltage	V_{F1}	$I_F=0.1mA$			240	mV
	V_{F2}	$I_F=1.0mA$			320	mV
	V_{F3}	$I_F=10mA$			400	mV
	V_{F4}	$I_F=30mA$			500	mV
	V_{F5}	$I_F=100mA$			1000	mV
Reverse current	I_R	$V_R=25V$			2.0	μA
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

RATING AND CHARACTERISTIC CURVES (BAT5X)

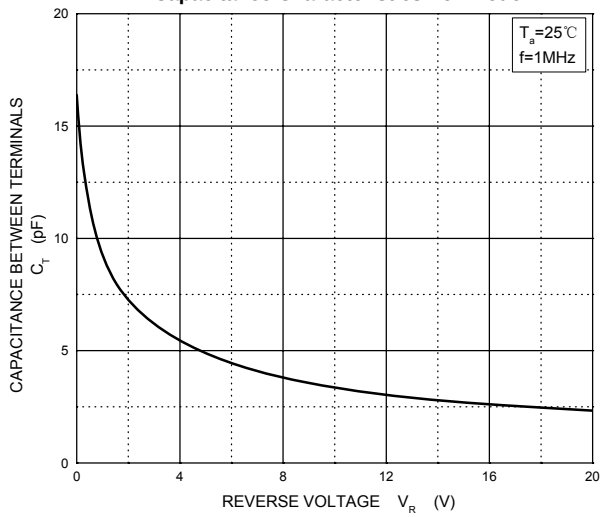
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics Per Diode



Power Derating Curve

