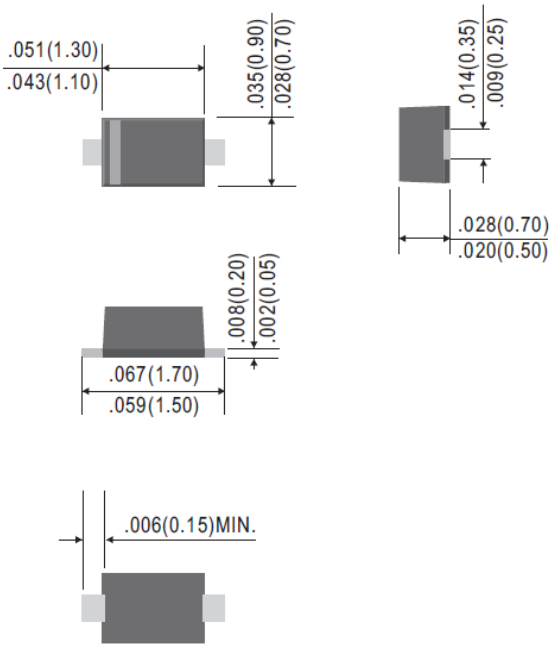
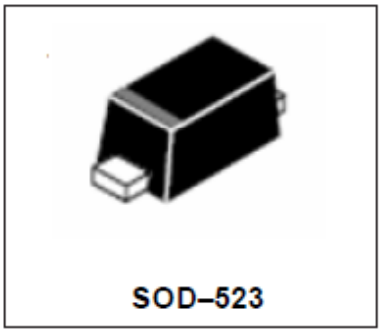
BAT54X

200mA Surface Mount Schottky Barrier Rectifiers-30V



Dimensions in inches and (millimeters)



FEATURES

·Extremely Fast Switching Speed
·Low Forward Voltage — 0.35 Volts (Typ) @ I_F = 10 mAdc
·Device Marking: JV
·RoHS product for packing code suffix "G"
·Halogen free product for packing code suffix "H"
·Moisture Sensitivity Level 1
·Polarity: Color band denotes cathode end

Maximum Ratings (T_J=125°C unless otherwise noted)			
Rating	**Symbol**	**Value**	**Unit**
Reverse Voltage	V_R	30	V

Thermal Characteristics			
Characteristic	**Symbol**	**Max**	**Unit**
Total Device Dissipation FR-5 Board,* T_A=25°C	P_D	200	mW
Derate above 25°C		1.57	mW/°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C/W
Operating/ Junction and Storage Temperature	T_J, T_{STG}	-55~+150	°C

*FR-4 Minimum Pad

BAT54X

200mA Surface Mount Schottky Barrier Rectifiers-30V

Electrical Characteristics (T_A=25°C unless otherwise noted)(EACH DIODE)					
Characteristic	**Symbol**	**Min.**	**Typ.**	**Max.**	**Unit**
Reverse Breakdown Voltage (I_R=10μA)	$V_{(BR)R}$	30	—	—	Volts
Total Capacitance (V_R = 1.0 V, f = 1.0 MHz)	C_r	—	7.6	10	pF
Reverse Leakage (V_R = 25 V)	I_R	—	0.5	2	μAdc
Forward Voltage (I_F = 0.1 mAdc)	V_F	—	0.22	0.24	Vdc
Forward Voltage (I_F = 1.0 mAdc)	V_F	—	0.29	0.32	Vdc
Forward Voltage (I_F = 10 mAdc)	V_F	—	0.35	0.4	Vdc
Forward Voltage (I_F = 30 mAdc)	V_F	—	0.41	0.5	Vdc
Forward Voltage (I_F = 100 mAdc)	V_F	—	0.52	1	Vdc
Reverse Recovery Time (I_F = I_R = 10 mAdc, $I_{R(REC)}$ = 1.0 mAdc)	t_{rr}	—	—	5	ns
Forward Current (DC)	I_F	—	—	200	mAdc
Repetitive Peak Forward Current	I_{FRM}	—	—	300	mAdc
Non–Repetitive Peak Forward Current (t < 1.0 s)	I_{FSM}	—	—	600	mAdc

TYPICAL CHARACTERISTICS