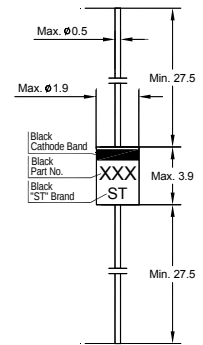


BAT42, BAT43

SCHOTTKY BARRIER DIODES

for general purpose applications



Glass Case DO-35
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Forward Continuous Current	I_F	200	mA
Repetitive Peak Forward Current (at $t_p < 1$ s)	I_{FRM}	500	mA
Surge Forward Current (at $t_p < 10$ ms)	I_{FSM}	4	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 200$ mA	V_F	-	-	1	V
at $I_F = 10$ mA	V_F	-	-	0.4	V
at $I_F = 50$ mA	V_F	-	-	0.65	V
at $I_F = 2$ mA	V_F	0.26	-	0.33	V
at $I_F = 15$ mA	V_F	-	-	0.45	V
Reverse Breakdown Voltage at $I_R = 100$ μA	$V_{(BR)R}$	30	-	-	V
Reverse Leakage Current at $V_R = 25$ V	I_R	-	-	0.5	μA
Diode Capacitance at $V_R = 1$ V, $f = 1$ MHz	C_{tot}	-	7	-	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{rr} = 0.1 \times I_R$, $R_L = 100$ Ω	t_{rr}	-	-	5	ns

