

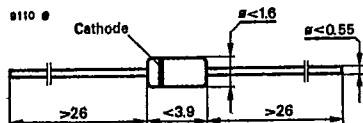


T-03-09

Silicon Epitaxial Planar Diode

Applications: Very fast switches

Dimensions in mm



Marking: By letters

Standard glass case
54A2 DIN 41880
JEDEC DO 35
Weight max. 0.15 g

Absolute maximum ratings

Repetitive peak reverse voltage	V_{RRM}	25	V
Reverse voltage	V_R	20	V
Surge forward current $t_p = 1 \mu s$	I_{FSM}	2	A
Repetitive peak forward current	I_{FRM}	225	mA
Forward current	I_F	200	mA
Average forward current $V_R = 0$	I_{FAV}	75	mA
Power dissipation $l = 4 \text{ mm}, T_L = 45 \text{ }^\circ\text{C}$	P_V	440	mW
$T_L \leq 25 \text{ }^\circ\text{C}$	P_V	500	mW
Junction temperature	T_j	200	$^\circ\text{C}$
Storage temperature range	T_{stg}	- 55....+ 200	$^\circ\text{C}$

Maximum thermal resistance

Junction ambient $l = 4 \text{ mm}, T_L = \text{constant}$	R_{thJA}	350	K/W
---	------------	-----	-----

BAY 93

T-03-09

Characteristics		Min.	Typ.	Max.
$T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified				
Forward voltage				
$I_F = 10\text{ mA}$	V_F			1 V
Reverse current				
$V_R = 10\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R			100 μA
Breakdown voltage				
$I_R = 1\text{ }\mu\text{A}$	$V_{(BR)}^{(1)}$	20		V
Diode capacitance				
$V_R = 0, f = 1\text{ MHz}, V_{HF} = 50\text{ mV}$	C_D			5 pF
Reverse recovery time				
$I_F = I_R = 10\text{ mA}, I_R = 1\text{ mA}$	t_{rr}			15 ns

¹⁾ $\frac{t_p}{T} = 0.01, t_p = 0.3\text{ ms}$