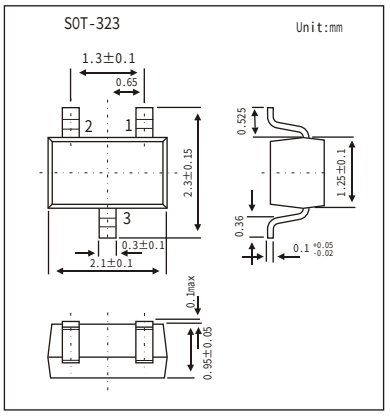
TY Semicondutor®

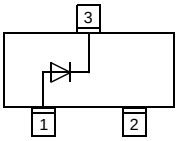
Product specification

KAS19W - KAS21W



■ Features

- ● Fast switching speed
- ● Suface mount package Ideally suited for automatic insertion
- ● For general purpose switching applications



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	KAS19W	KAS20W	KAS21W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	140	V
Average Rectified Output Current	I_O	200			mA
Forward Continuous Current	I_{FM}	400			mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 μ s @ t = 1.0s	I_{FSM}	2.5 0.5			A
Repetitive Peak Forward Surge Current	I_{FRM}	625			mA
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625			K/W
Operating and Storage Temperature Range	T,T_{STG}	-65 to +150			℃

■ Electrical Characteristics Ta = 25°C

Parameter		Symbol	Testconditons	Min	Typ	Max	Unit
Reverse Breakdown Voltage	KAS19W KAS20W KAS21W	$V_{(BR)R}$	I_R=100 μ A	120 200 250			V
Forward Voltage		V_F	I_F = 100mA I_F = 200mA			1.0 1.25	V
Reverse Current @ Rated DC Blocking Voltage		I_R	Tj = 25°C T_j = 100°C			100 15	nA μ A
Junction Capacitance		C_j	V_R = 0, f = 1.0MHz			5	pF
Reverse Recovery Time		t_{rr}	I_F = I_R = 30mA,I_{rr} = 0.1 X I_R, R_L = 100 Ω			50	ns

BAV19W - BAV21W

■ Typlacl Characteristics

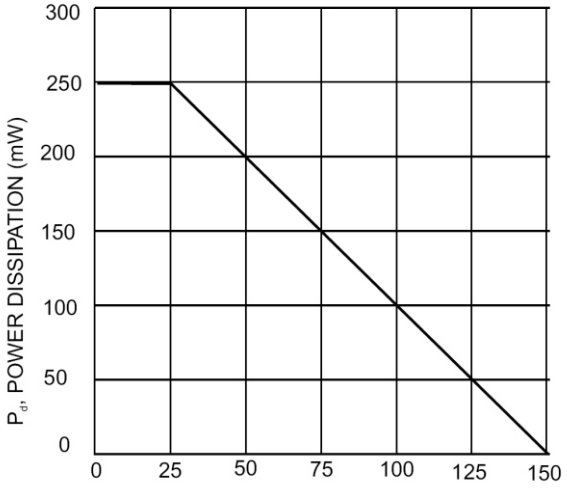


Fig. 1 Power Derating Curve

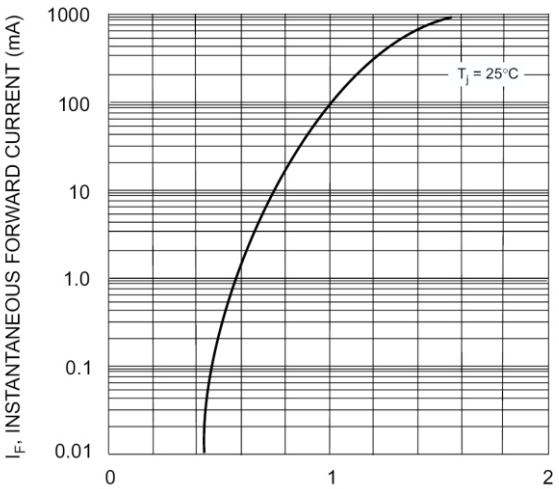


Fig. 2 Typical Forward Characteristics

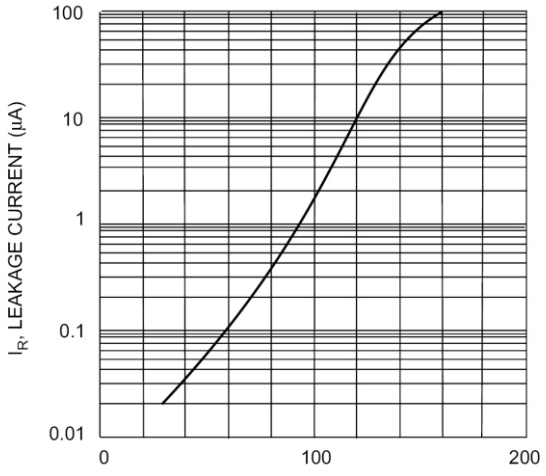


Fig. 3 Leakage Current vs Junction Temperature