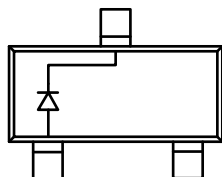
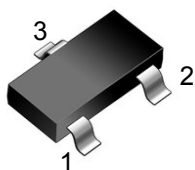


SOT-23



Marking: KA2

Features

Fast Switching Device (TRR <4.0 nS)

Power Dissipation of 400mW

High Stability and High Reliability

Low reverse leakage

Halogen free and RoHS compliant

Mechanical Data

SOT-23 Small Outline Plastic Package

Polarity: Color band denotes cathode end

Epoxy UL: 94V-0

Mounting Position: Any

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM} V_{RWM} V_R	Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	75	V
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_{FM}	Forward Continuous Current	300	mA
I_o	Average Rectified Output Current	150	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	2.0	A
P_d	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	350	°C/W
T_J	Operation Junction Temperature Range	-55~+150	°C
T_{STG}	Storage Temperature Range	-55~+150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

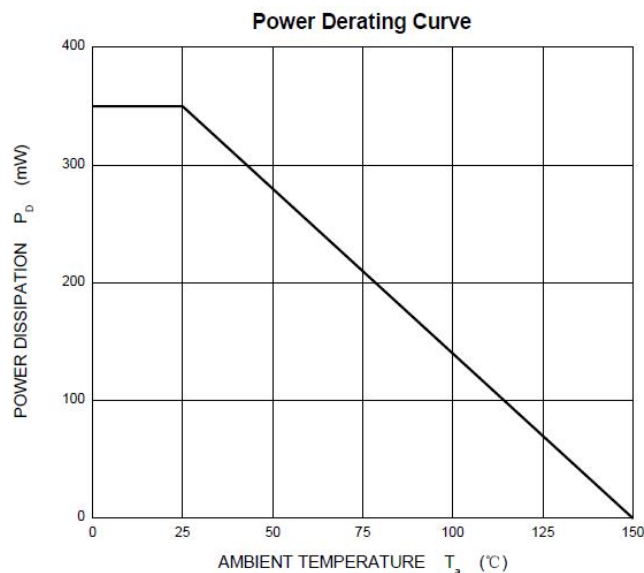
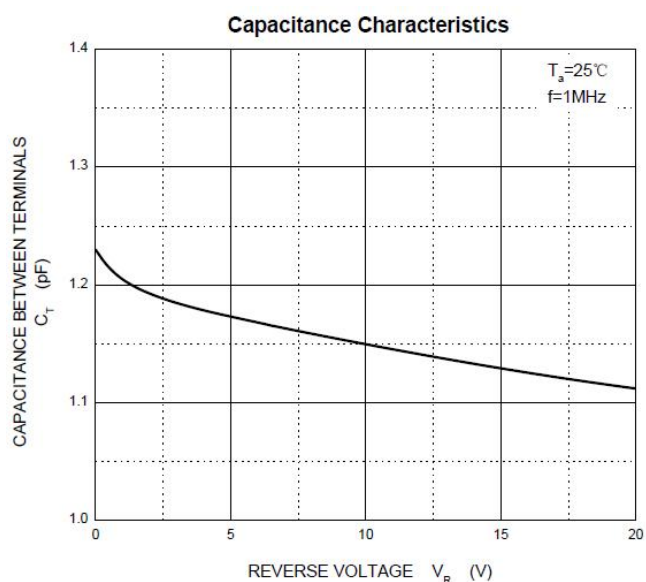
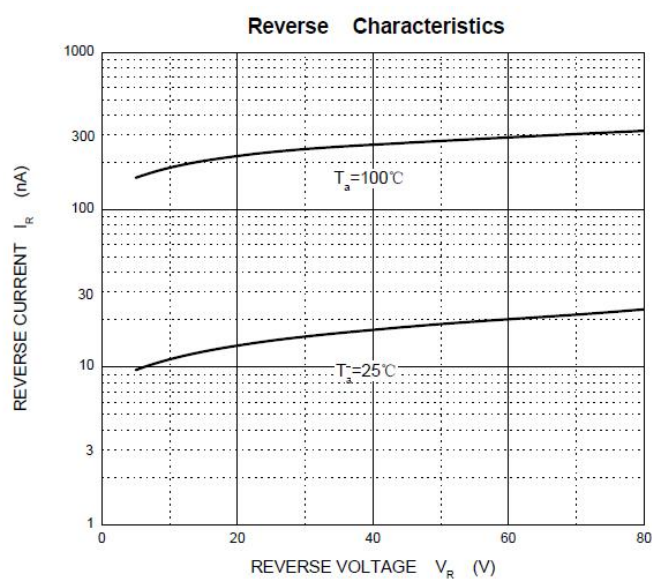
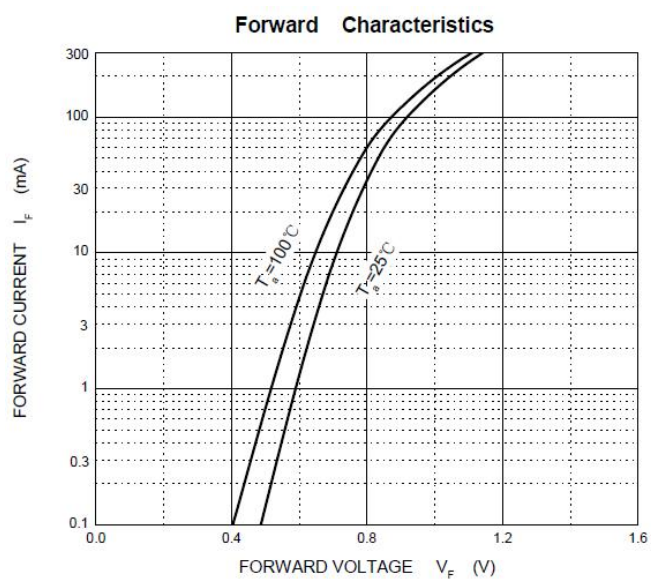
Symbol	Parameter	Test conditions	Min	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu A$	75		V
I_R	Reverse current	$V_R=75V$		2.5	μA
		$V_R=20V$		25	nA
V_{F1}	Forward voltage	$I_F=1mA$		0.715	V
V_{F2}		$I_F=10mA$		0.855	V
V_{F3}		$I_F=50mA$		1.0	V
V_{F4}		$I_F=150mA$		1.25	V
C_T	Capacitance between terminals	$V_R=0V, f=1MHz$		2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$		4	nS

Summary of Packing Options

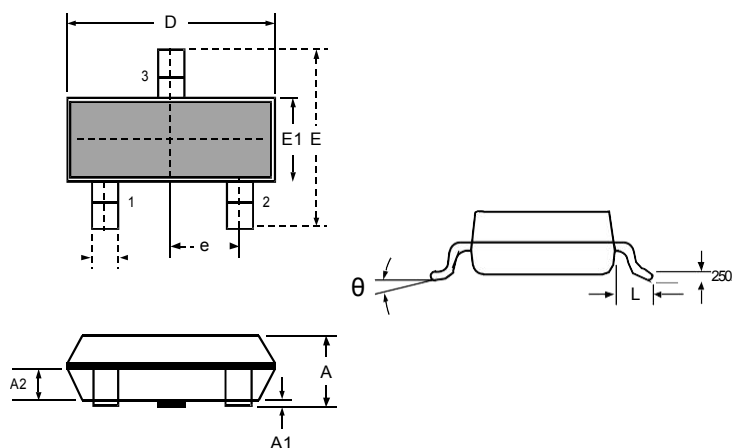
Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1



Ratings and Characteristic Curves



Package Outline Dimensions: SOT-23



SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
θ	0	8°	0	8°