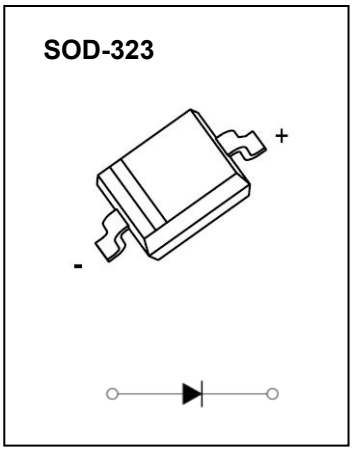
KEEN SIDE electronics

BAS416

FAST SWITCHING DIODE

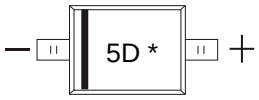
SOD-323 Plastic-Encapsulate Diodes



FEATURES

- **Small surface mounting type**
- **High speed**
- **High reliability with high surge current handling capability**

MARKING:5D *



5D = Device Code.
Earlier: D4. New 5D implemented: 08/23.

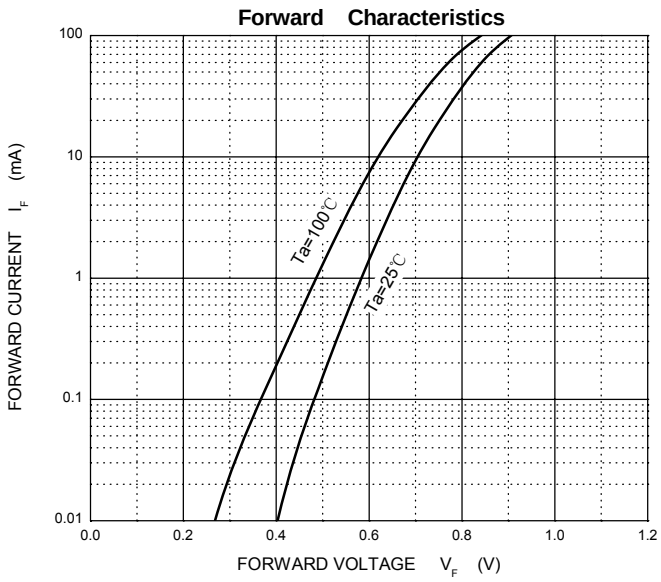
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

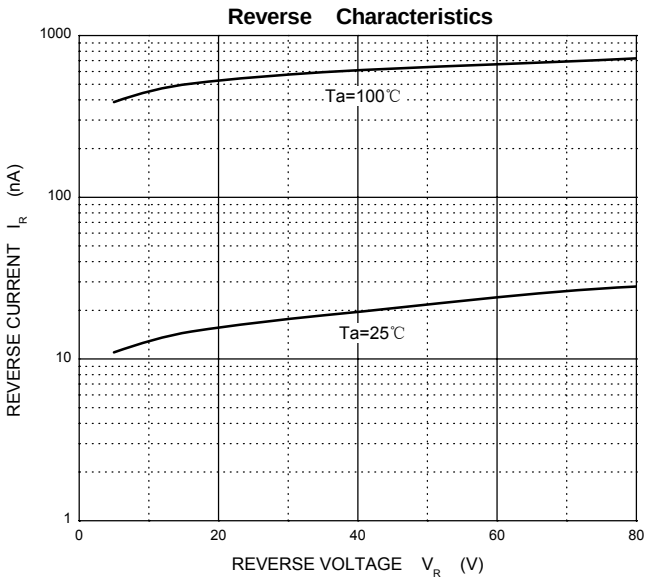
Parameter	Symbol	Limit	Unit
Non-repetitive peak reverse voltage	V_{RM}	110	V
DC blocking voltage	V_R	80	V
Peak forword current	I_{FM}	250	mA
Average rectified output current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	℃/W
Operation Junction and Storage Temperature Range	T_J,T_{STG}	-55~+150	℃

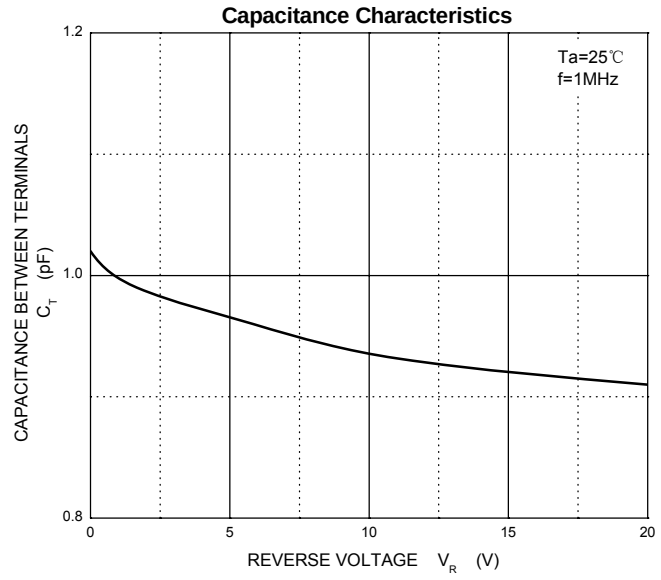
Electrical Ratings @Ta=25℃

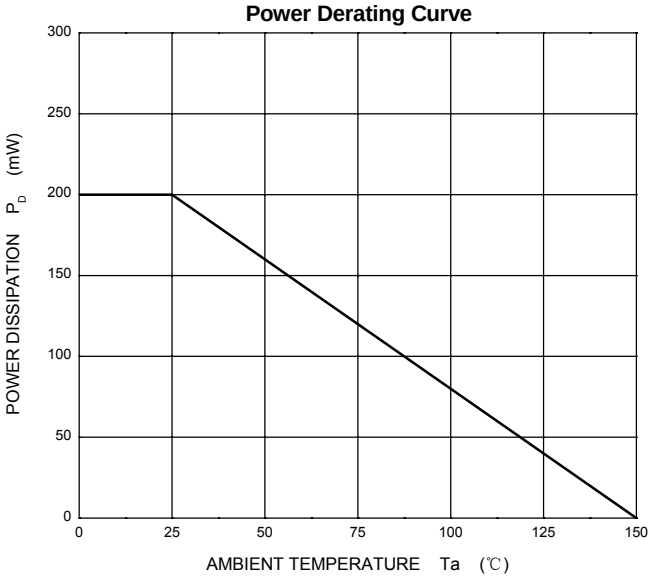
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			1.2	V	I_F=150mA
Reverse current	I_R			0.1	μA	V_R=80V
Capacitance between terminals	C_T			3	pF	V_R=0.5V,f=1MHz
Reverse recovery time	t_{rr}			4	ns	I_F=10mA ,V_R=6V,R_L=100Ω

Typical Characteristics

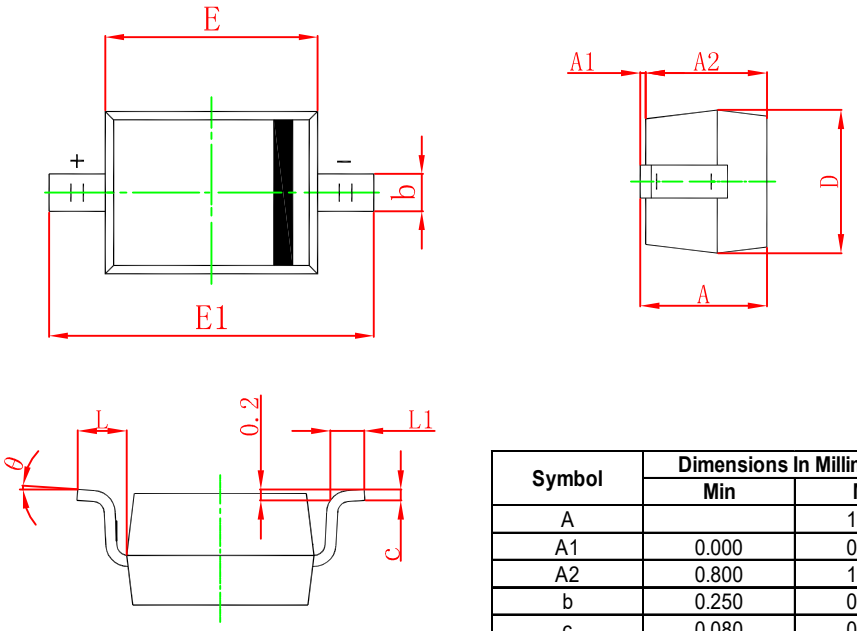






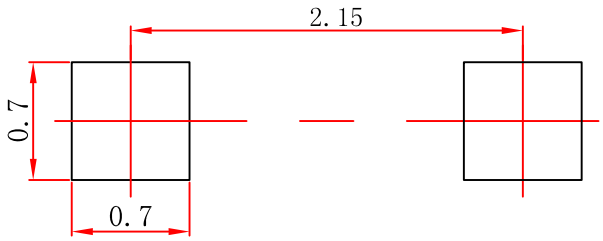


SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.