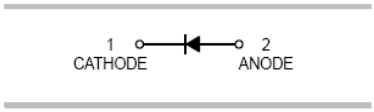
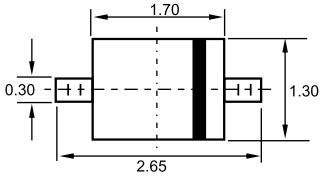
BAS316G

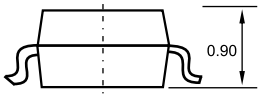
Silicon Epitaxial Planar Diodes

RoHS COMPLIANT



SOD-323





Dimensions in inches and (millimeters)

Features

- ✧ Very small plastic SMD package.
- ✧ High switching speed:max.4ns
- ✧ Continuous reverse voltage:max.100v
- ✧ Repetitive peak reverse voltage:max.100v
- ✧ Repetitive peak forward current:max.500mA

Applications

- ✧ Surface mount fast switching diode

Ordering Information

Type No.	Marking	Package Code
BAS316G	A6	SOD-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Value**	**Unit**
DC Reverse Voltage	V_R	100	V
Forward Current	I_F	300	mA
Power Dissipation	P_d	200	mW
Junction and Storage Temperature Rage	T_j,T_{STG}	-65 to+150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	100	-	V	I_R=100μA
Forward Voltage	V_F	0.62	0.715 0.855 1.0 1.25	V	I_F=1.0mA I_F=10mA I_F=50mA I_F=150mA
Reverse Current	I_R	-	1.0 0.03	μA	V_R=75V V_R=25V
Capacitance between terminals	C_T	-	1.5	pF	V_R=0,f=1.0MHz
Reverse Recovery Time	t_{rr}	-	4.0	ns	I_F=I_R=10mA,R_L=100Ω

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

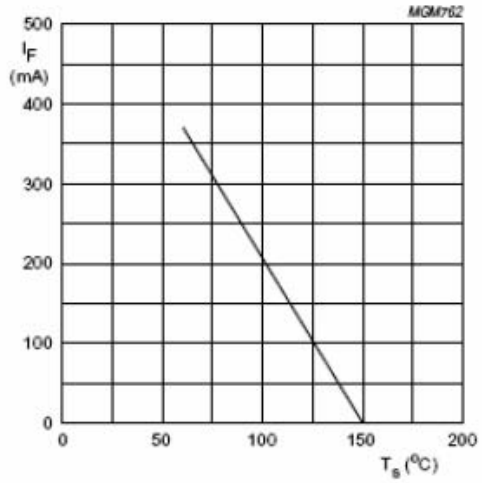
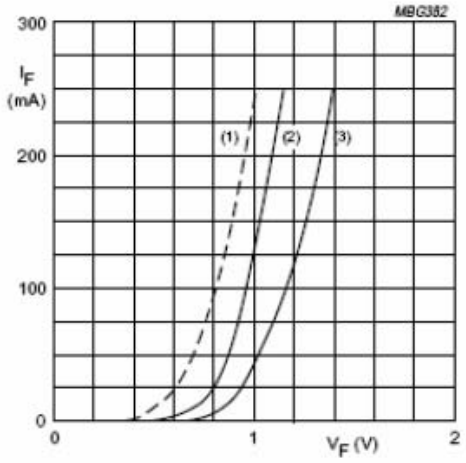
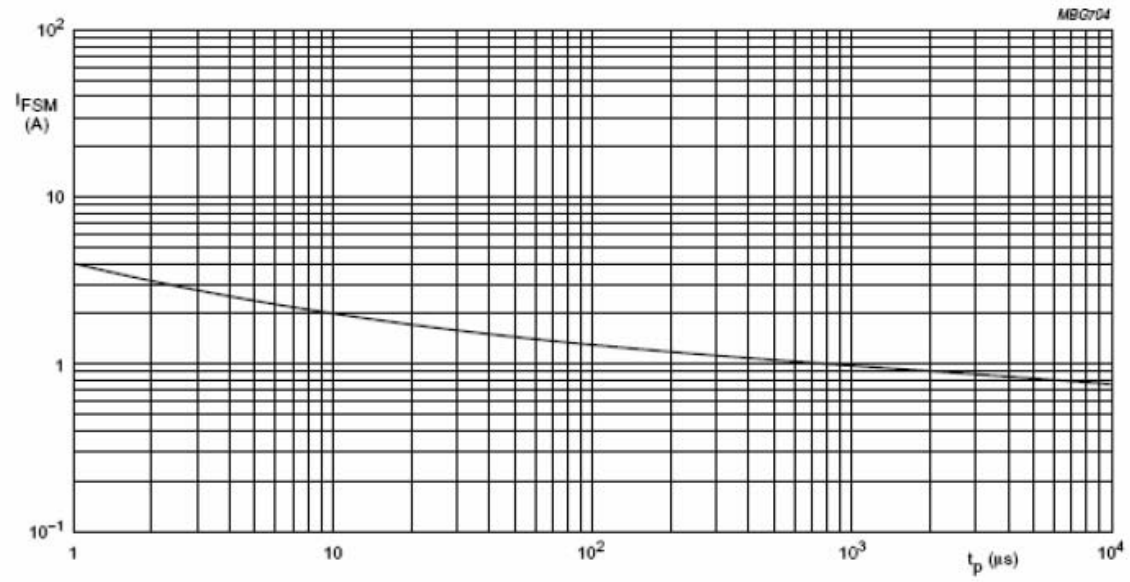


Fig.2 Maximum permissible continuous forward current as a function of soldering point temperature.



(1) T_j = 150 °C; typical values.
(2) T_j = 25 °C; typical values.
(3) T_j = 25 °C; maximum values.

Fig.3 Forward current as a function of forward voltage.



Based on square wave currents.
T_j = 25 °C prior to surge.

Fig.4 Maximum permissible non-repetitive peak forward current as a function of pulse duration.

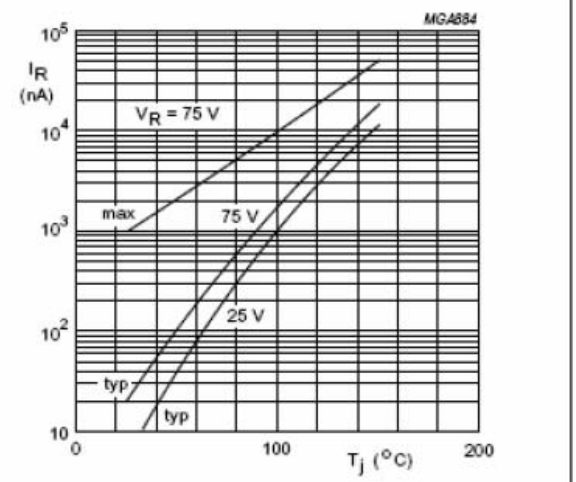
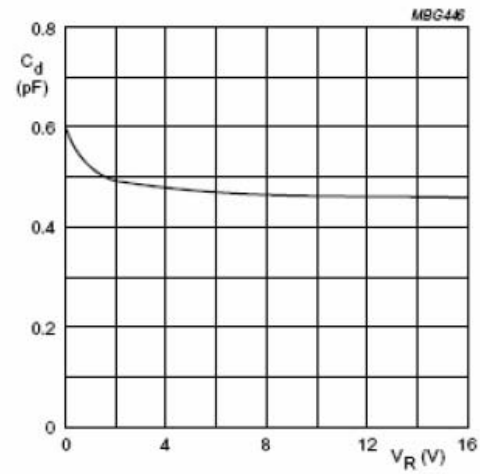


Fig.5 Reverse current as a function of junction temperature.



f = 1 MHz; T_j = 25 °C.

Fig.6 Diode capacitance as a function of reverse voltage; typical values.

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-323	3000/REEL	180000	44X44X22	9.00	8.00