



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOD-523 Plastic-Encapsulate Diodes

BAS516

Switching Diodes

FEATURES

- Small surface mounting type
- High switching speed

Marking: 61



Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

Parameter	Symbol	Limits	Unit
DC reverse voltage	V _R	75	V
Mean rectifying current	I _O	250	mA
Peak forward surge current	I _{FSM}	0.5	A
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-65~+150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V _F			0.715 0.855 1 1.25	V	I _F =1mA I _F =10mA I _F =50mA I _F =150mA
Reverse current	I _R			0.03 1	μA	V _R =25V V _R =75V
Capacitance between terminals	C _T			1	pF	V _R =0, f=1MHZ
Reverse recovery time	t _{rr}			4	ns	I _F =10mA, R _L =100Ω

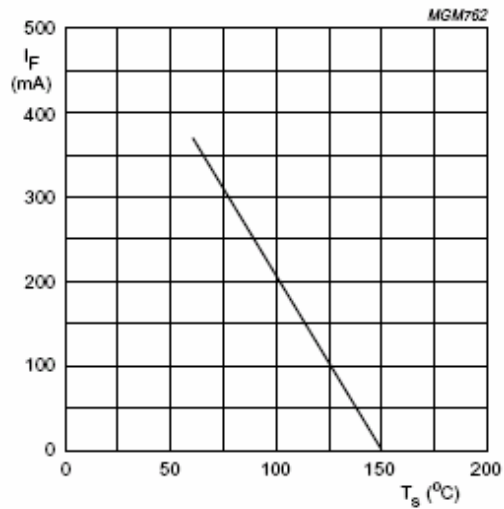
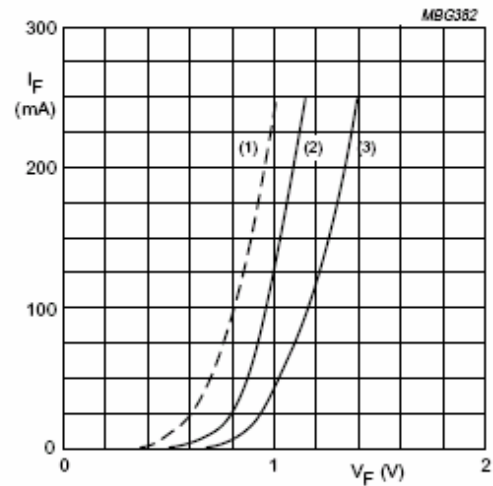
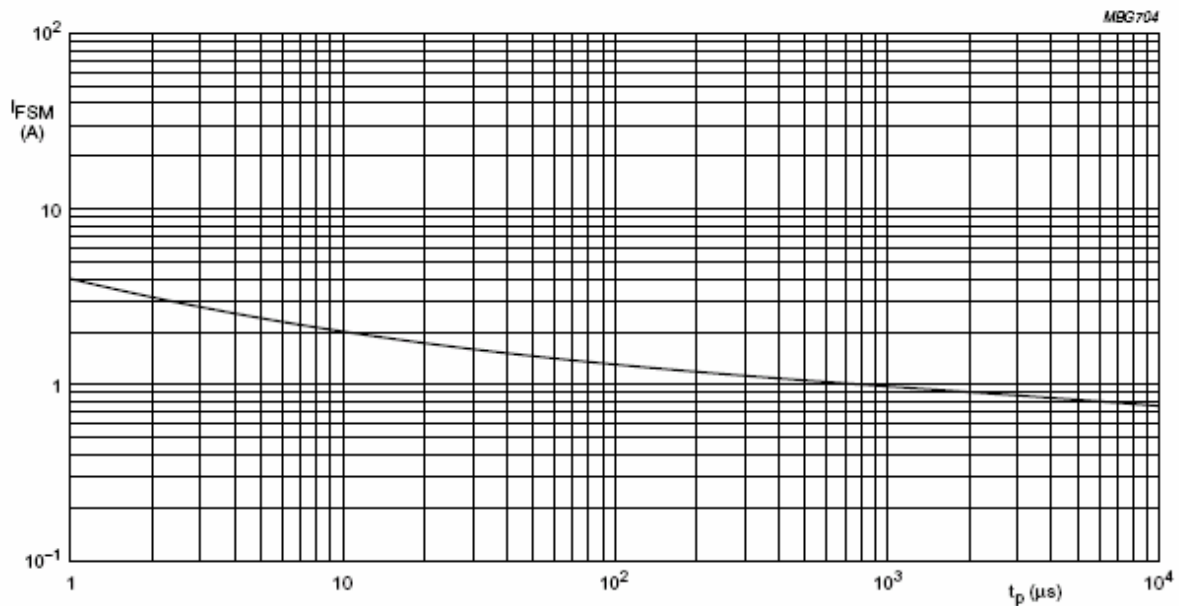


Fig.2 Maximum permissible continuous forward current as a function of soldering point temperature.



- (1) $T_j = 150^{\circ}\text{C}$; typical values.
- (2) $T_j = 25^{\circ}\text{C}$; typical values.
- (3) $T_j = 25^{\circ}\text{C}$; maximum values.

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



Based on square wave currents; $T_j = 25^{\circ}\text{C}$ prior to surge.

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

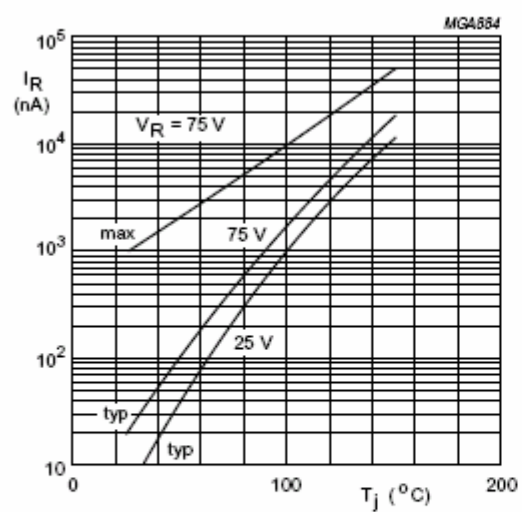
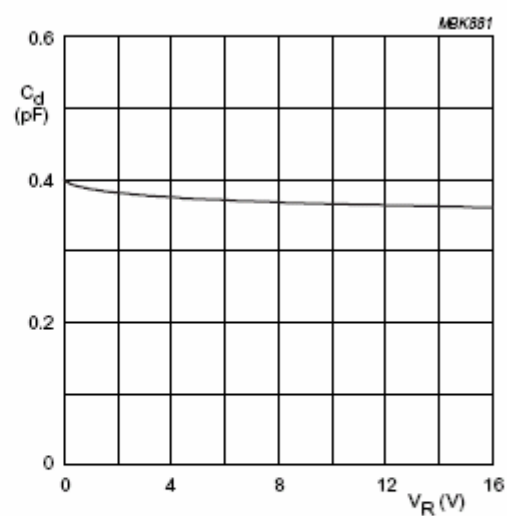


Fig.5 Reverse current as a function of junction temperature.



$f = 1\text{ MHz}$; $T_J = 25\text{ }^{\circ}\text{C}$.

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