

SWITCHING DIODES

PRODUCT SUMMARY

SOD-523 Plastic-Encapsulate Diodes

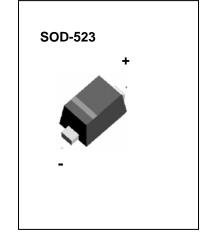
FEATURES

Small surface mounting type High switching speed



Pb-free; RoHS-compliant





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	Io	250	mA
Peak forward surge current	I _{FSM}	0.5	А
Junction temperature	Tj	150	$^{\circ}$
Storage temperature	T _{stg}	-65~+150	$^{\circ}$

ELECTRICAL RATINGS @T_A=25 °C

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



TYPICAL CHARACTERISTICS

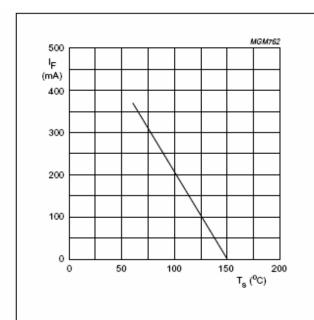
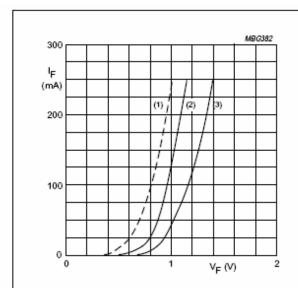
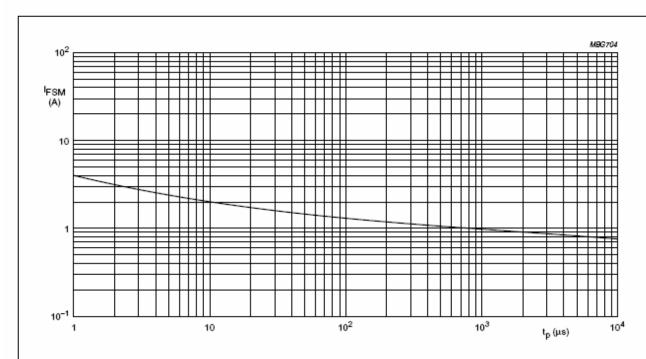


Fig.2 Maximum permissible continuous forward current as a function of soldering point temperature.



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

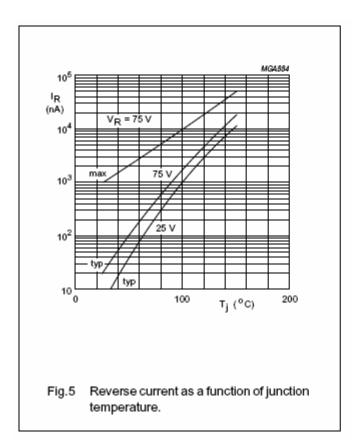
Fig.3 Forward current as a function of forward voltage.

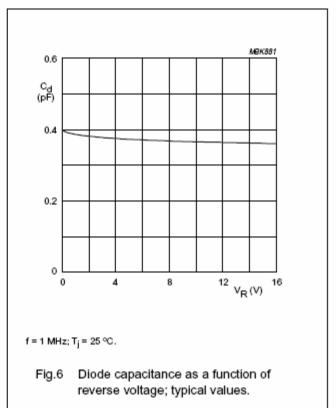


Based on square wave currents; T_j = 25 °C prior to surge.

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







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