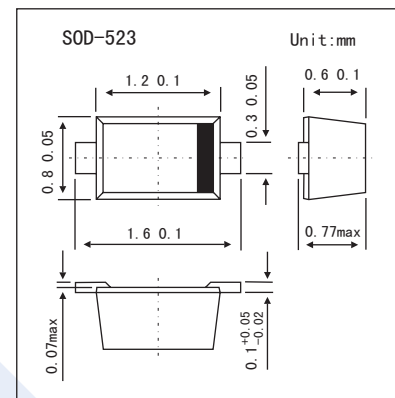


High Speed Switching Diodes

KAS516 (BAS516)



■ Features

- Small Surface Mounting Type
- High Speed

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	85	V
DC Reverse Voltage	V_R	75	V
Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Current	I_{FSM}	0.5	A
Total Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-65 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

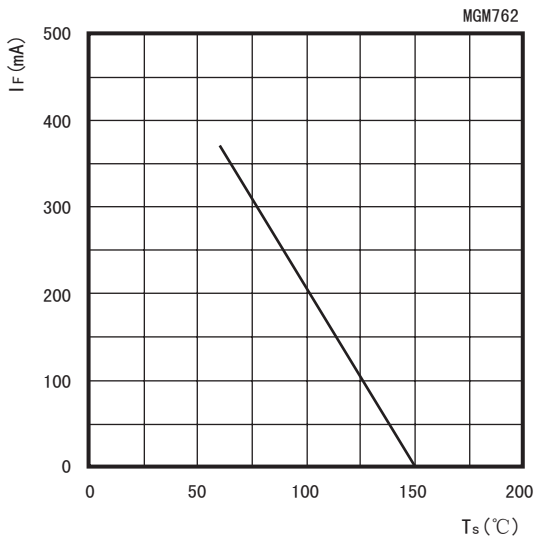
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 1\text{mA}$			0.715	V
		$I_F = 10\text{mA}$			0.855	
		$I_F = 50\text{mA}$			1.0	
		$I_F = 150\text{mA}$			1.25	
Reverse Current	I_R	$V_R = 25\text{V}$			0.03	μA
		$V_R = 75\text{V}$			1.0	
Capacitance Between Terminals	C_T	$V_R = 0\text{V}$, $f = 1.0\text{MHz}$			1.0	pF
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$, $R_L = 100\ \Omega$			4.0	ns

■ Marking

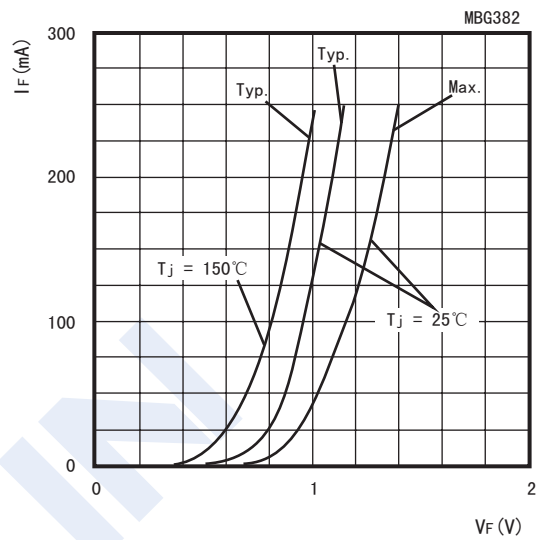
Marking	6
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KAS516 (BAS516)

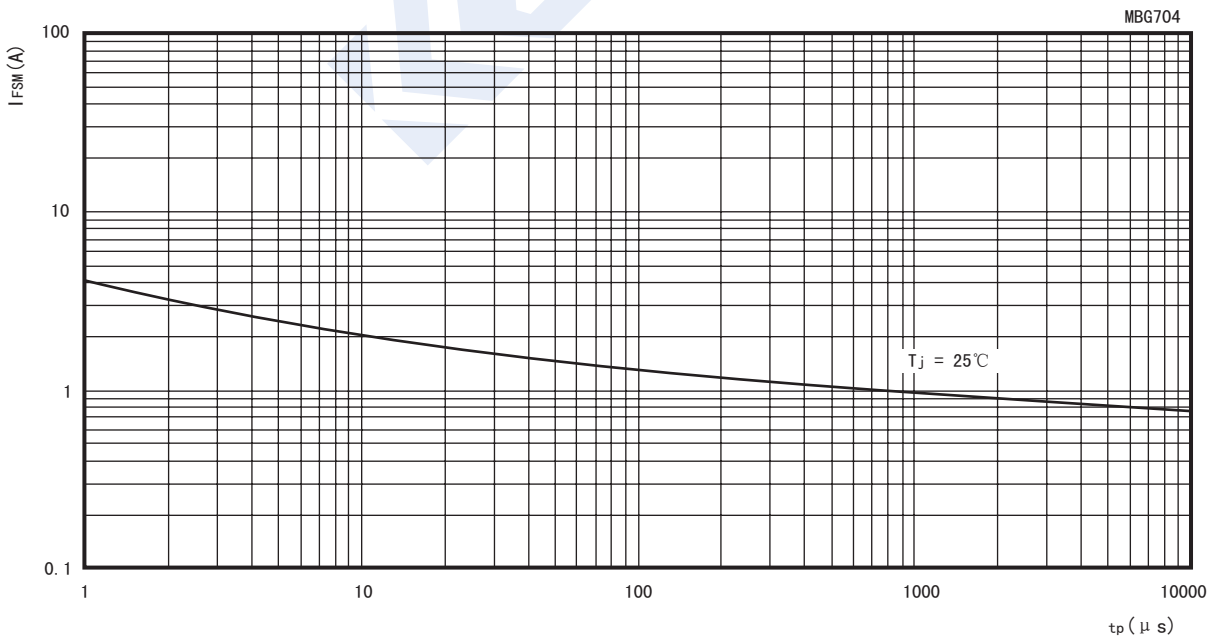
■ Electrical Characteristics Curves



Maximum Permissible Continuous Forward Current As A Function Of Soldering Point Temperature.

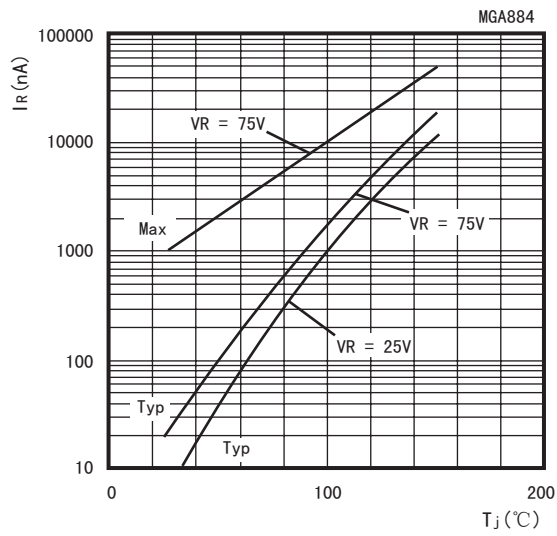


Forward Current As A Function Of Forward Voltage.

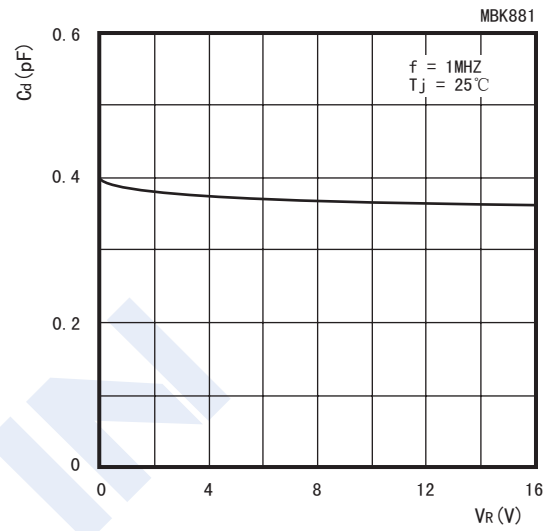


Maximum Permissible Non-repetitive Peak Forward Current As A Function Of Pulse Duration.

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Reverse Current As A Function Of Junction Temperature.



Diode Capacitance As A Function Of Reverse Voltage(Typical Values)