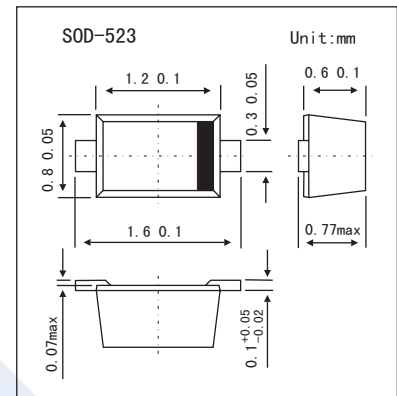


## High Speed Switching Diodes

## 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 $T_a = 25^\circ\text{C}$

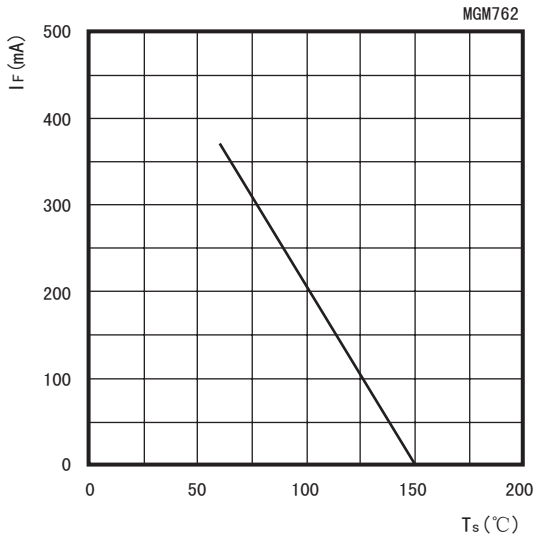
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F = 1\text{mA}$			0.715	V
		$I_F = 10\text{mA}$			0.855	
		$I_F = 50\text{mA}$			1.0	
		$I_F = 150\text{mA}$			1.25	
Reverse Current	$I_R$	$V_R = 25\text{V}$			0.03	$\mu\text{A}$
		$V_R = 75\text{V}$			1.0	
Capacitance Between 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

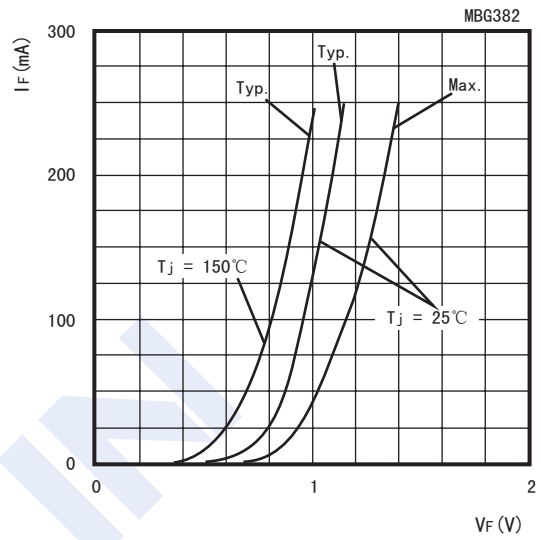
Marking	6
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### KAS516 (BAS516)

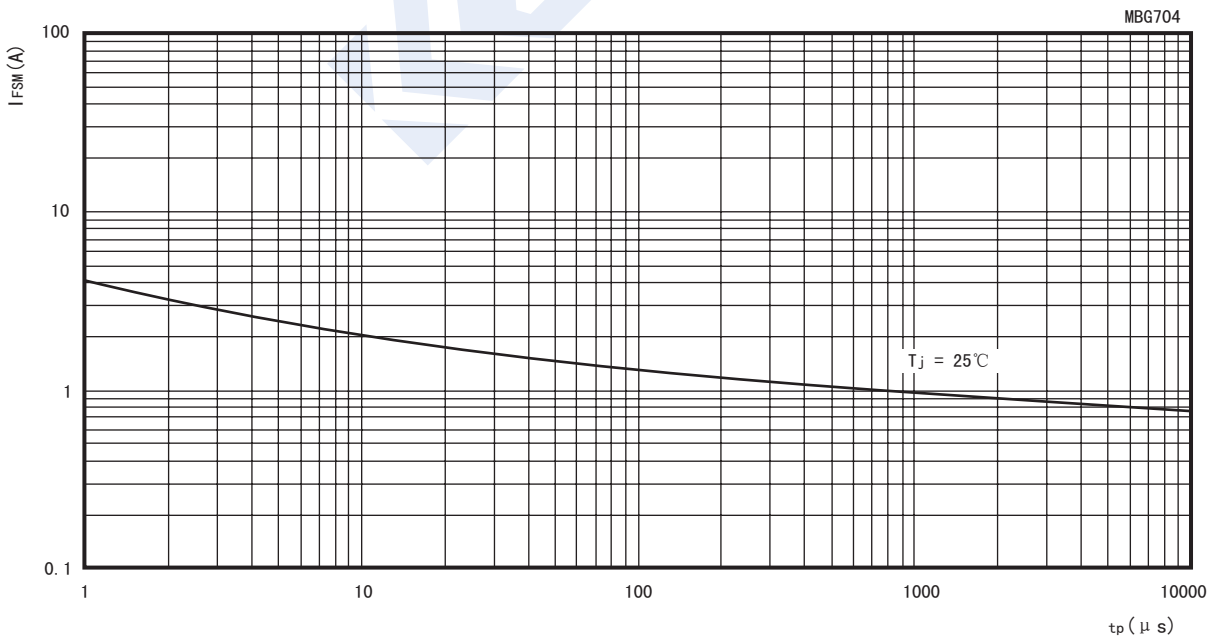
■ Electrical Characteristics Curves



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

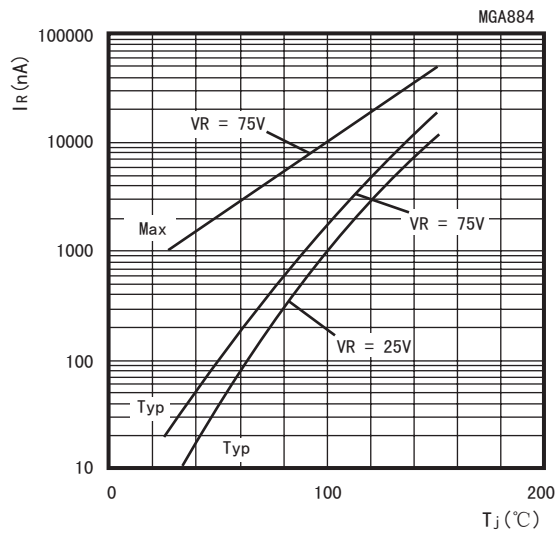


Forward Current As A Function Of Forward Voltage.

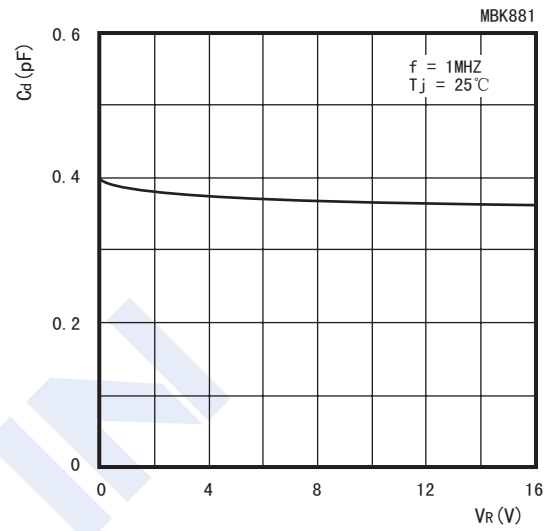


Maximum Permissible Non-repetitive Peak Forward Current As A Function Of Pulse Duration.

KAS516 (BAS516)



Reverse Current As A Function Of Junction Temperature.



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