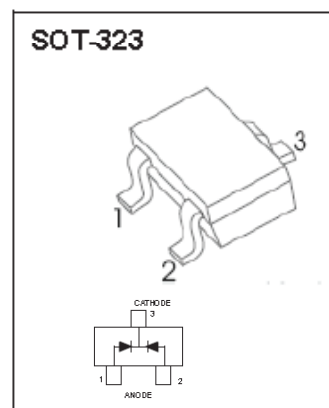
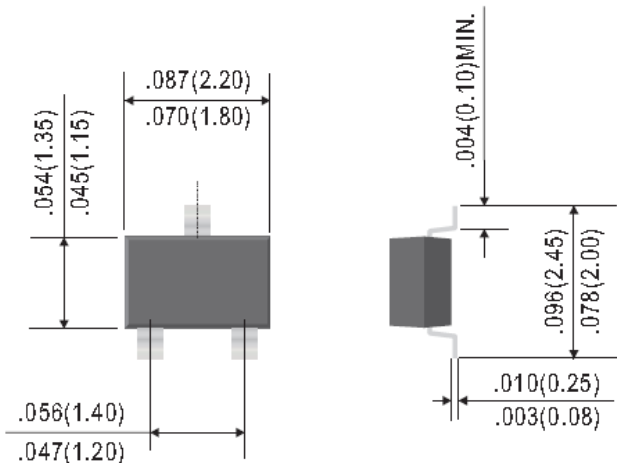


Dimensions in inches and (millimeters)

FEATURES

- Fast $t_{rr} < 3.0$ ns
- Low $C_D < 2.0$ pF
- We declare that the material of product compliance with RoHS requirements
- Pb-Free package is available
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1

Marking:

LM1MA141WK	MT
LM1MA142WK	MU

Common Cathode Silicon Dual Switching Diode

Maximum Ratings (T _A =25°C unless otherwise noted)				
Rating		Symbol	Value	Unit
Reverse Voltage	LM1MA141WK	V _R	40	V _{dc}
	LM1MA142WK		80	
Peak Reverse Voltage	LM1MA141WK	V _{RM}	40	V _{dc}
	LM1MA142WK		80	
Forward Current	Single	I _F	100	mA _{dc}
	Dual		150	
Peak Forward Current	Single	I _{FM}	225	mA _{dc}
	Dual		340	
Peak Forward Surge Current	Single	I _{FSM} ⁽¹⁾	500	mA _{dc}
	Dual		750	

Thermal Characteristics (T _A =25°C unless otherwise noted)			
Characteristic	Symbol	Max	Unit
Power Dissipation	P _D	150	mW
Junction Temperature	T _J	150	°C
Operating/ Storage Temperature	T _{STG}	-55~+150	°C

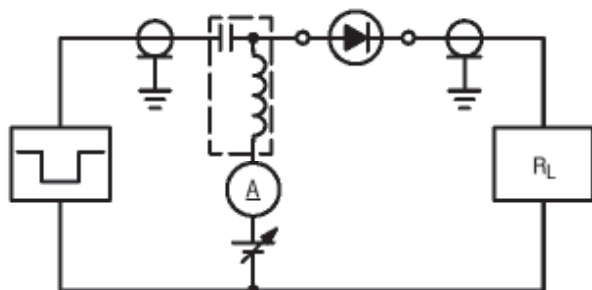
Electrical Characteristics (T _A =25°C unless otherwise noted)						
Characteristic		Symbol	Condition	Min.	Max.	Unit
Reverse Voltage Leakage Current	LM1MA141WK	I _R	V _R = 35 V	—	0.1	μA _{dc}
	LM1MA142WK		V _R = 75 V	—	0.1	
Forward Voltage		V _F	I _F = 100 mA	—	1.2	V _{dc}
Reverse Breakdown Voltage	LM1MA141WK	V _R	I _R = 100 μA	40	—	V _{dc}
	LM1MA142WK			80	—	
Diode Capacitance		C _D	V _R =0, f=1.0 MHz	—	2	pF
Reverse Recovery Time		t _{rr} ⁽²⁾	I _F =10mA, V _R =6.0V R _L =100Ω, I _{rr} =0.1 I _R	—	3	ns

1. t = 1 SEC

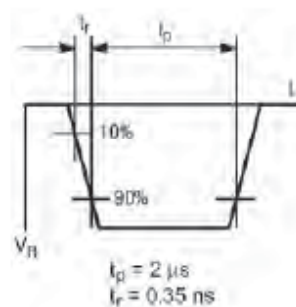
2. t_{rr} Test Circuit

Common Cathode Silicon Dual Switching Diode

RECOVERY TIME EQUIVALENT TEST CIRCUIT



INPUT PULSE



OUTPUT PULSE

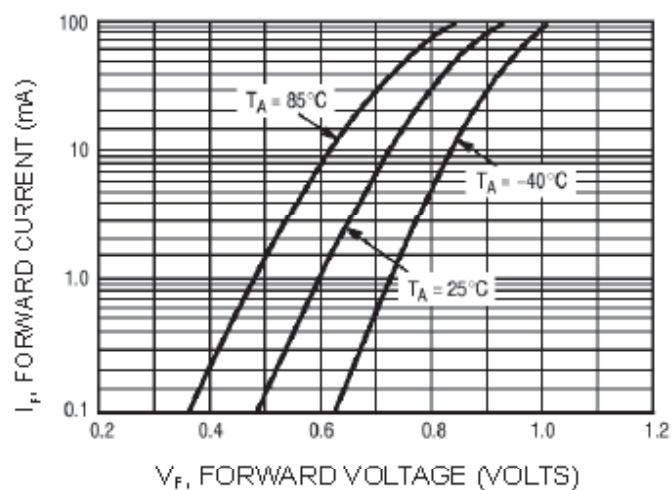
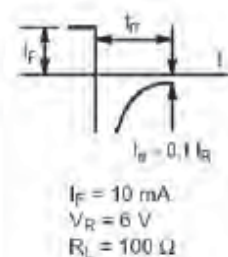


Figure 1. Forward Voltage

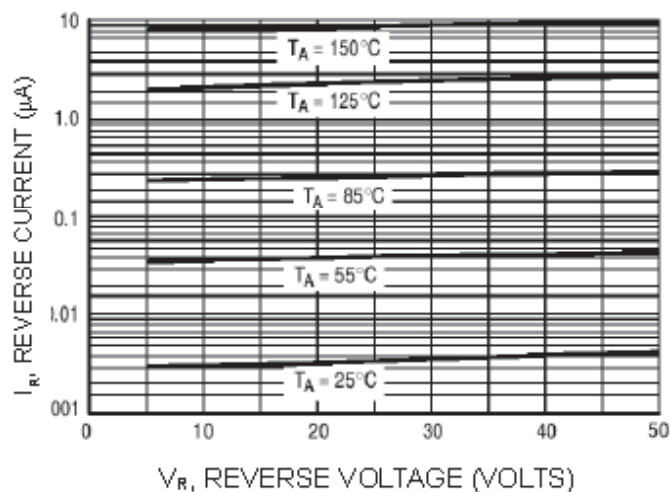


Figure 2. Reverse Current

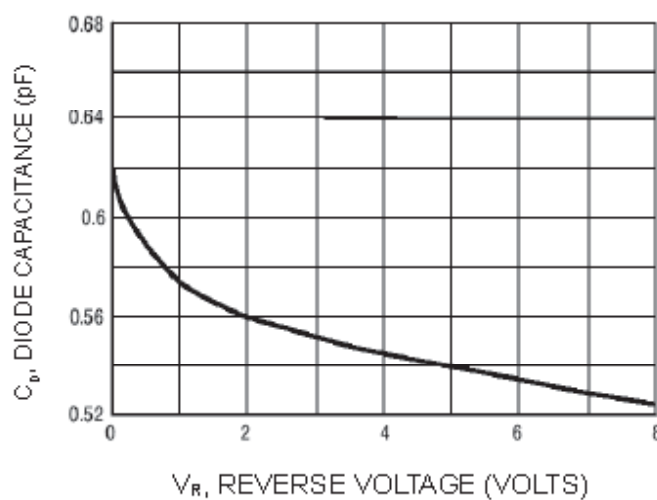


Figure 3. Diode Capacitance