

M1MA141WAT1, M1MA142WAT1

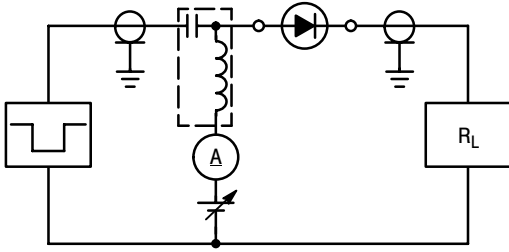
ELECTRICAL CHARACTERISTICS (T_A = 25°C)

Characteristic	Condition	Symbol	Min	Max	Unit
Reverse Voltage Leakage Current M1MA141WAT1 M1MA142WAT1	V _R = 35 V V _R = 75 V	I _R	–	0.1	μA _{dc}
Forward Voltage	I _F = 100 mA	V _F	–	1.2	V _{dc}
Reverse Breakdown Voltage M1MA141WAT1 M1MA142WAT1	I _R = 100 μA	V _R	40 80	–	V _{dc}
Diode Capacitance	V _R = 0, f = 1.0 MHz	C _D	–	15	pF
Reverse Recovery Time (Figure 1)	I _F = 10 mA, V _R = 6.0 V, R _L = 100 Ω, I _{rr} = 0.1 I _R	t _{rr} (Note 2)	–	10	ns

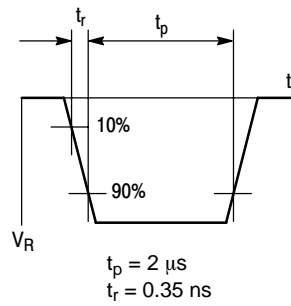
2. t_{rr} Test Circuit

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RECOVERY TIME EQUIVALENT TEST CIRCUIT



INPUT PULSE



OUTPUT PULSE

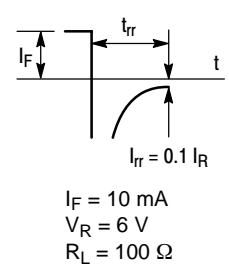


Figure 1. Recovery Time Equivalent Test Circuit

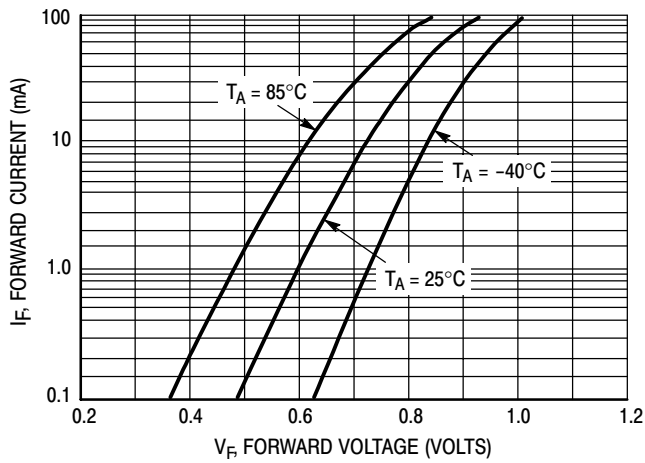


Figure 2. Forward Voltage

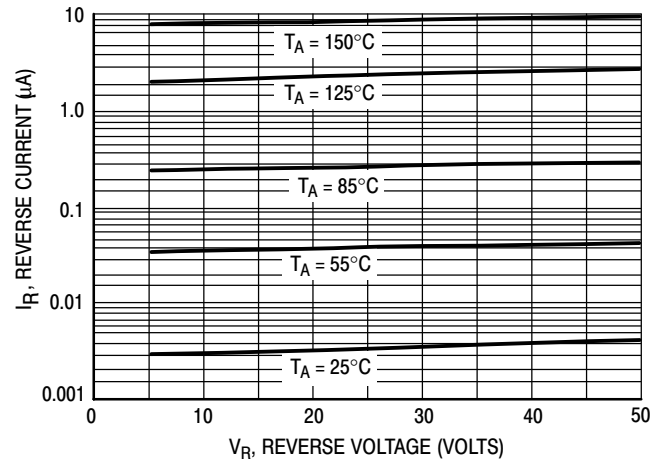


Figure 3. Reverse Current

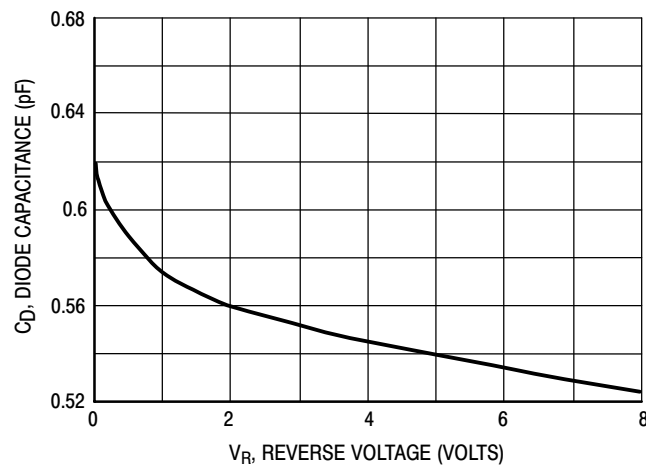
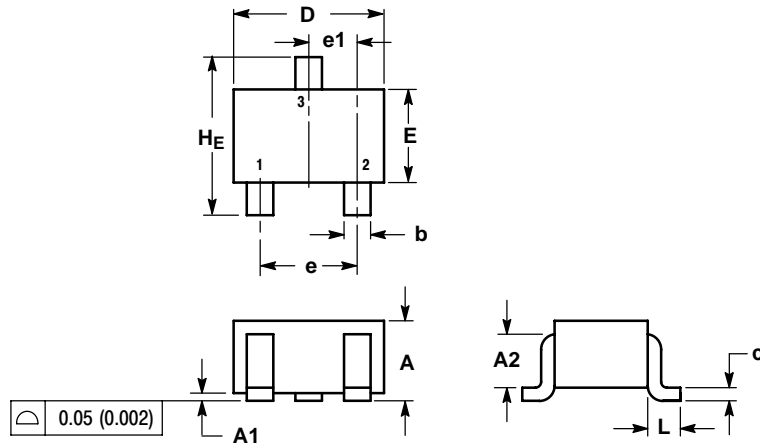


Figure 4. Diode Capacitance

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PACKAGE DIMENSIONS

SC-70 (SOT-323)
CASE 419-04
ISSUE M

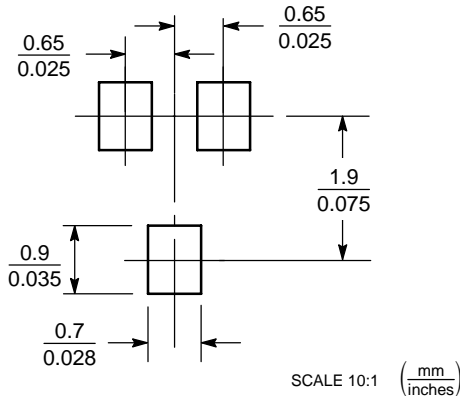


NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.


DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A2	0.7 REF			0.028 REF		
b	0.30	0.35	0.40	0.012	0.014	0.016
c	0.10	0.18	0.25	0.004	0.007	0.010
D	1.80	2.10	2.20	0.071	0.083	0.087
E	1.15	1.24	1.35	0.045	0.049	0.053
e	1.20	1.30	1.40	0.047	0.051	0.055
e1	0.65 BSC			0.026 BSC		
L	0.425 REF			0.017 REF		
HE	2.00	2.10	2.40	0.079	0.083	0.095

STYLE 4:
PIN 1. CATHODE
2. CATHODE
3. ANODE

SOLDERING FOOTPRINT*



*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

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