

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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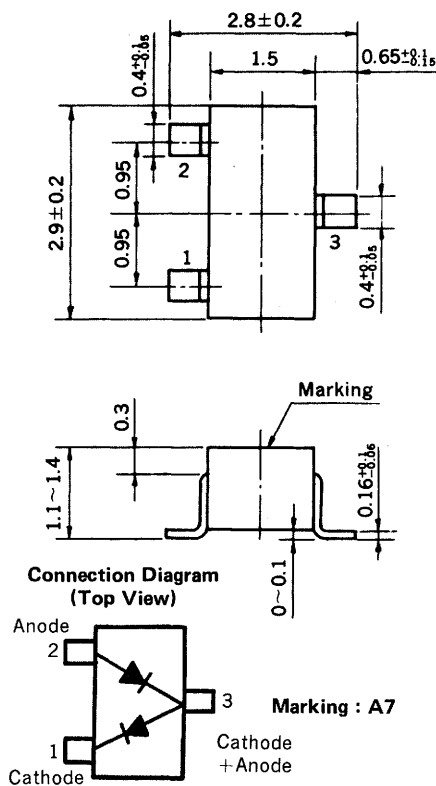
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**Phase-out/Discontinued**

**HIGH SPEED SWITCHING  
SILICON EPITAXIAL DOUBLE DIODES : SERIES CONNECTED  
MINI MOLD**

**PACKAGE DIMENSIONS**  
in millimeters



**FEATURES**

- Low capacitance:  $C_t = 4.0 \text{ pF MAX.}$
- High speed switching:  $t_{rr} = 9.0 \text{ ns MAX.}$
- Wide applications including switching, limiter, clipper.
- Double diode configuration assures economical use.

**ABSOLUTE MAXIMUM RATINGS**

Maximum Voltages and Currents ( $T_a = 25^\circ\text{C}$ )

Peak Reverse Voltage	$V_{RM}$	70	V
DC Reverse Voltage	$V_R$	70	V
Peak Forward Current	$I_{FM}$	200	mA
Average Rectified Current	$I_O$	100	mA
DC Forward Current	$I_F$	100	mA

Maximum Temperatures

Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Thermal Resistance

Junction to Ambient*	$R_{th(j-a)}$	1.0	$^\circ\text{C/mW}$
Junction to Ambient	$R_{th(j-a)}$	0.67	$^\circ\text{C/mW}$

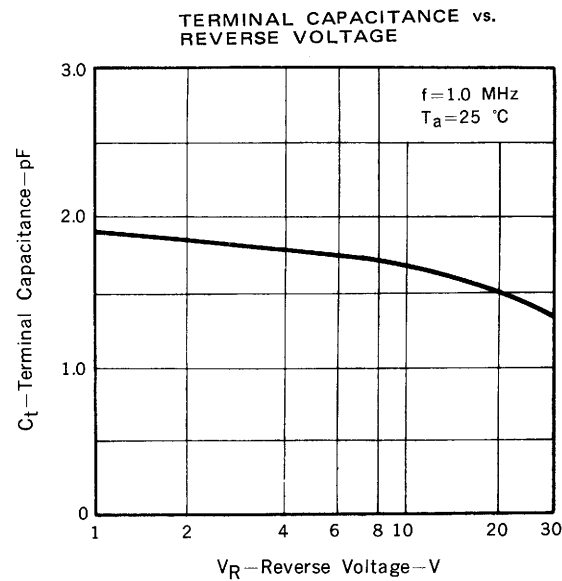
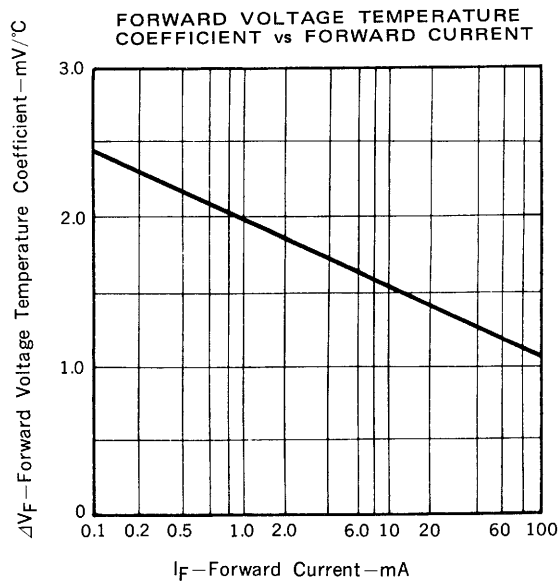
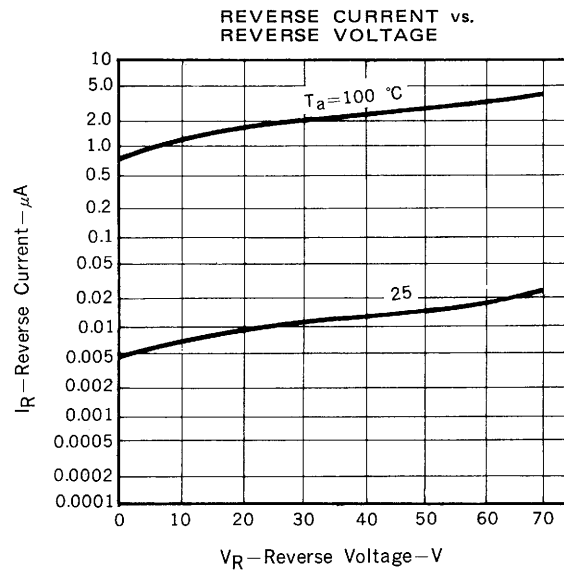
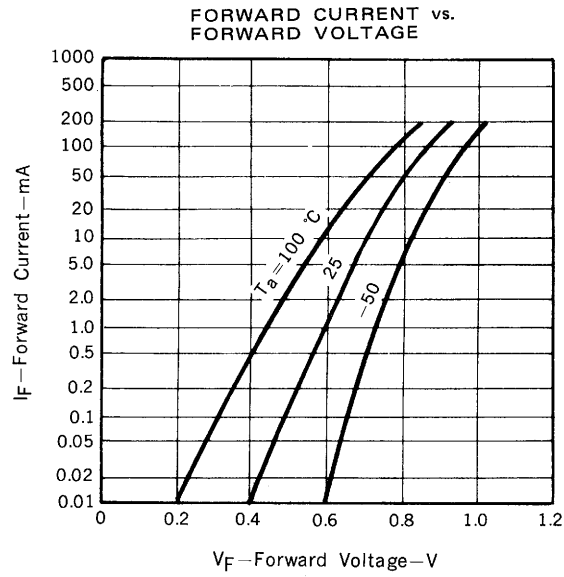
\* Both diodes loaded simultaneously.

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Forward Voltage	$V_{F1}$		600	715	mV	$I_F = 1.0 \text{ mA}$
	$V_{F2}$		750	855	mV	$I_F = 10 \text{ mA}$
	$V_{F3}$		850	1100	mV	$I_F = 50 \text{ mA}$
	$V_{F4}$		900	1300	mV	$I_F = 100 \text{ mA}$
Reverse Current	$I_R$			1.0	$\mu\text{A}$	$V_R = 70 \text{ V}$
Capacitance	$C_t$		2.5	4.0	pF	$V_R = 0, f = 1.0 \text{ MHz}$
Reverse Recovery Time	$t_{rr}$			9.0	ns	$I_F = 10 \text{ mA}, V_R = 1 \text{ V}, R_L = 100 \Omega$ See test circuit.
Forward Recovery Voltage	$V_{fr}$			1.75	V	$I_F = 10 \text{ mA}$ See Test Circuit.

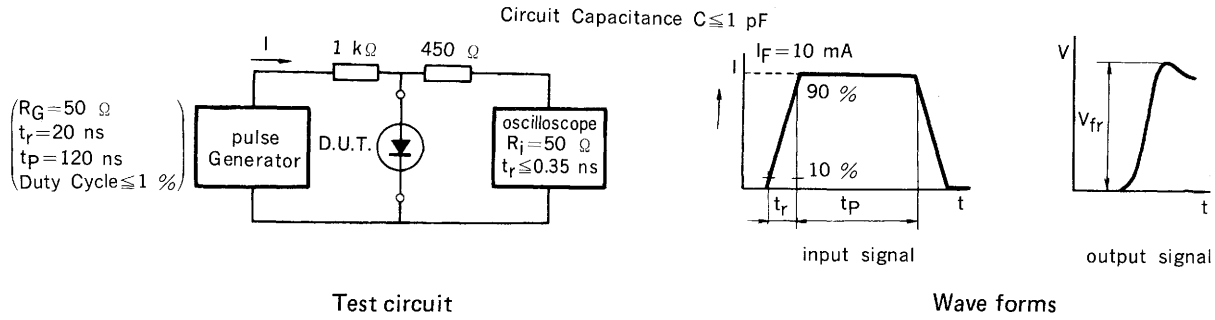
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TYPICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

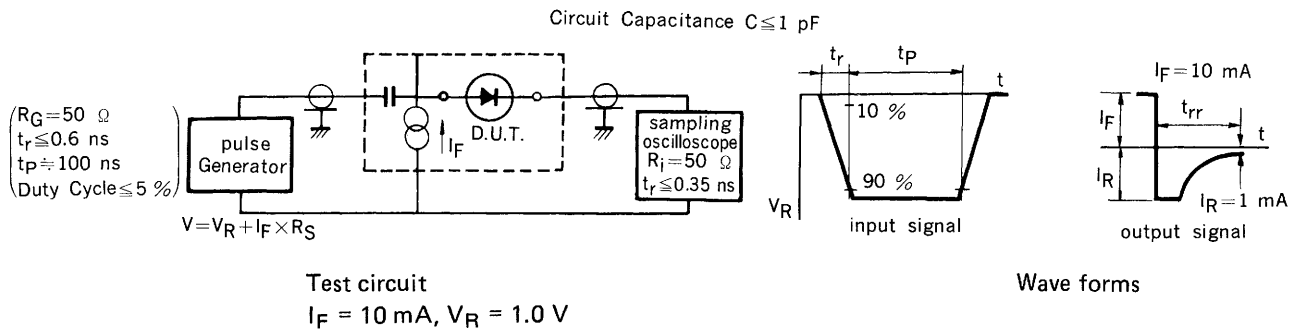


SWITCHING CHARACTERISTICS TEST CIRCUIT

Forward recovery voltage :  $V_{fr}$



Reverse recovery time :  $t_{rr}$



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