

●Applications

Ultra high speed switching

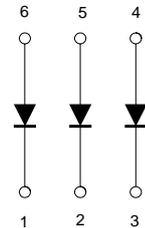
●Features

- 1) Multiple diodes in one small surface mount package.
- 2) Diode characteristics are matched in the package.
- 3) Pb-Free Package is Available.
- 4) S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



●Construction

Silicon epitaxial planar



●Device Marking Ordering Information

Device	Marking	Shipping
IMN10T1G S-IMN10T1G	N10	3000 Tape&Reel
IMN10T3G S-IMN10T3G	N10	10000 Tape&Reel

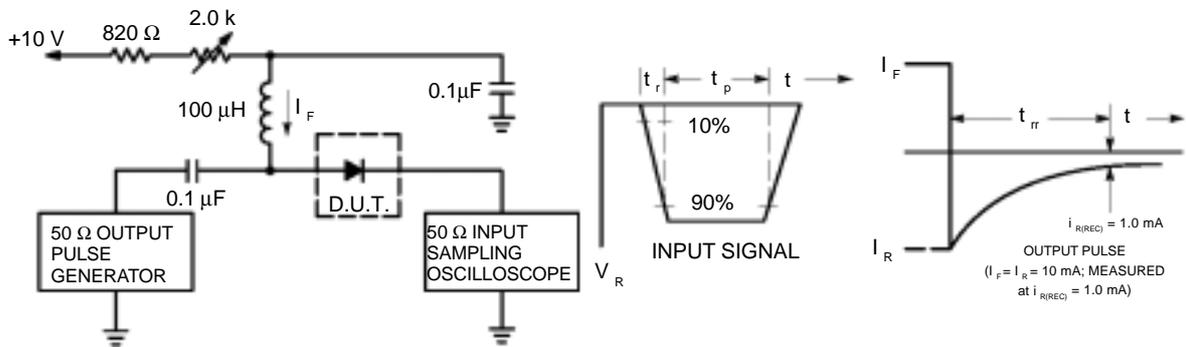
●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	80	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	300	mA
Mean rectifying current	I_O	100	mA
Surge current (1us)	I_{surge}	4	A
Power dissipation (total)	P_d	300 *1	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{slg}	- 55 ~ +150	°C

*1 Not to exceed 200mW per element.

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	1.2	V	$I_F=100mA$
Reverse current	I_R	-	-	0.1	μA	$V_R=70V$
Capacitance between terminals	C_T	-	-	3.5	pF	$V_R=6V$, $f=1MHz$
Reverse recovery time	t_{rr}	-	-	4	ns	$V_R=6V$, $I_F=5mA$



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

CURVES APPLICABLE TO EACH DIODE

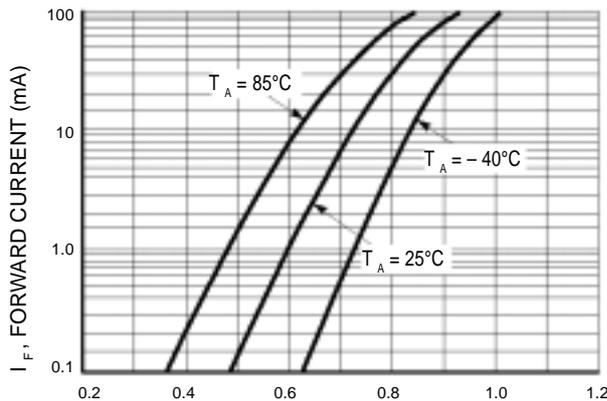


Figure 2. Forward Voltage

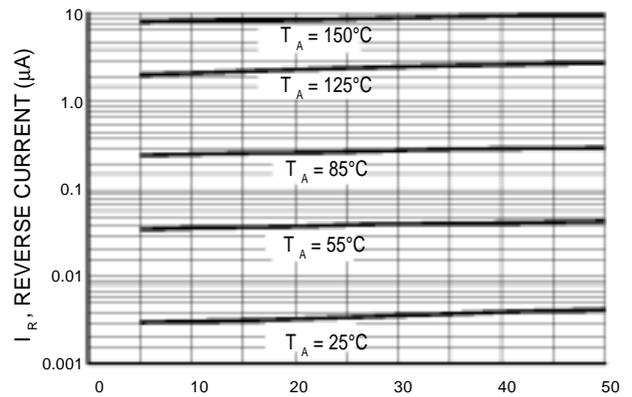


Figure 3. Leakage Current

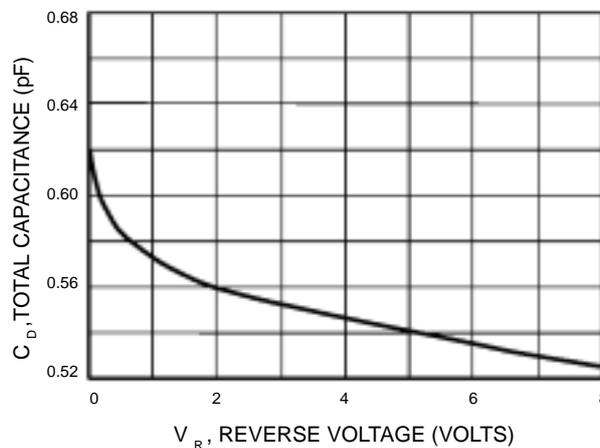
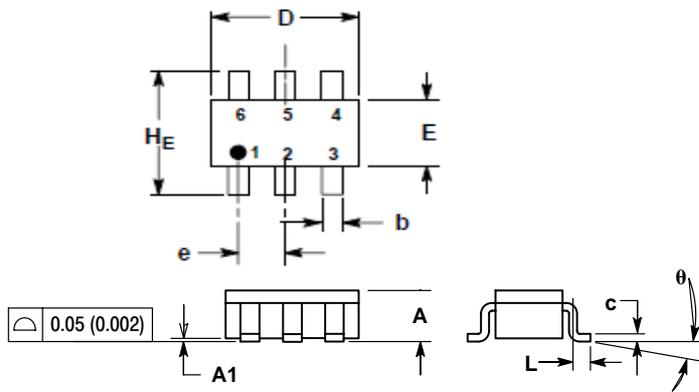


Figure 4. Capacitance

TSOP-6



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.90	1.00	1.10	0.035	0.039	0.043
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.25	0.37	0.50	0.010	0.015	0.020
c	0.10	0.18	0.26	0.004	0.007	0.010
D	2.90	3.00	3.10	0.114	0.118	0.122
E	1.30	1.50	1.70	0.051	0.059	0.067
e	0.85	0.95	1.05	0.034	0.037	0.041
L	0.20	0.40	0.60	0.008	0.016	0.024
HE	2.50	2.75	3.00	0.099	0.108	0.118
θ	0°	-	10°	0°	-	10°

SOLDERING FOOTPRINT*

