

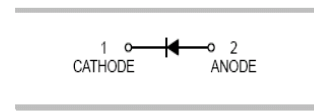
Features

- Low turn-on voltage
- Fast switching
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF

Mechanical Data

- Case: DFN1006-2
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208



DFN1006-2

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
TBAS40L	DFN1006-2	10000 pcs / Tape & Reel	43

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Working Peak Reverse Voltage	V _{RWM}	40	V
DC Reverse Voltage	V _R	40	V
Maximum Average Forward Output Current	I _{F(AV)}	0.2	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	0.6	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation (T _A = 25°C)	P _D	100	mW
Thermal Resistance Junction-to-Air	R _{θJA}	1000	°C/W
Operating junction Temperature	T _J	-55 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Electrical Characteristics (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 1mA	-	-	0.38	V
		I _F = 10mA	-	-	0.65	V
		I _F = 40mA	-	-	1.00	V
Maximum Peak Reverse Current	I _R	V _R = 30V	-	-	0.2	μA
Capacitance Between Terminals	C _T	V _R = 0V, f = 1MHz	-	2.5	5	pF
Reverse Recovery Time	t _{rr}	I _F = I _R = 10mA, R _L = 100Ω	-	-	5	ns

Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

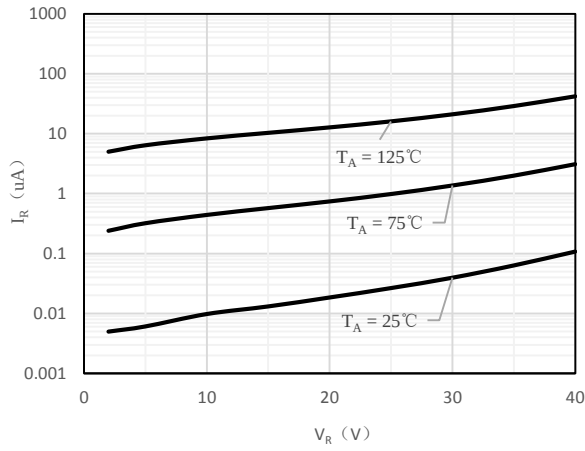


Fig 1 Typical Reverse Characteristic

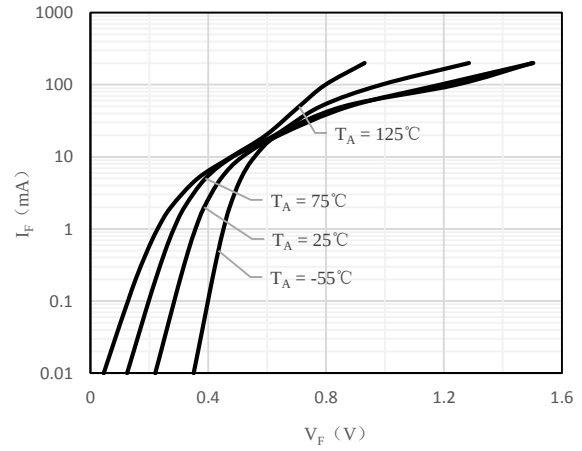


Fig 2 Typical Forward Characteristics

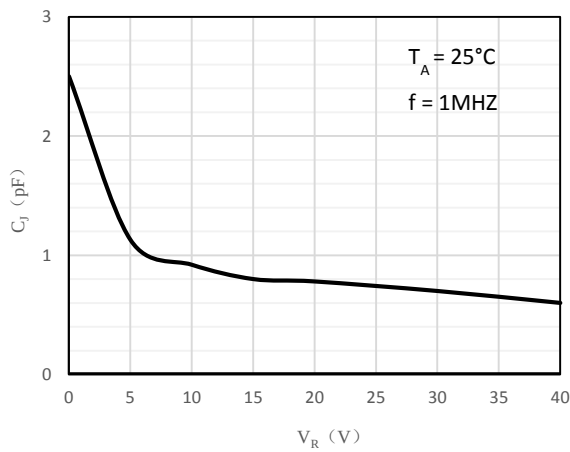


Fig 3 Capacitance Characteristics

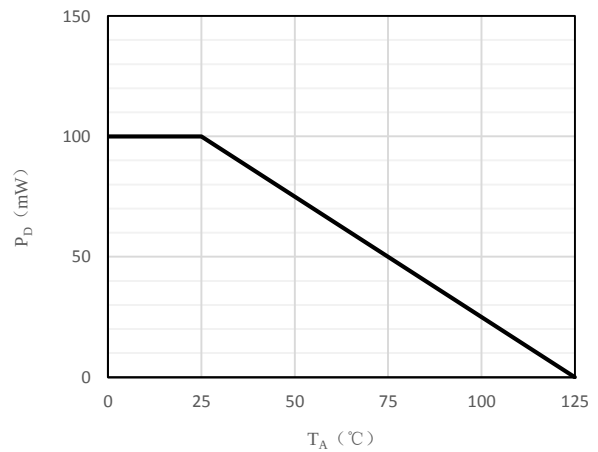
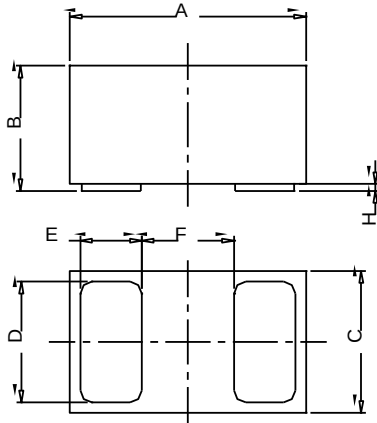


Fig 4 Steady State Power Derating

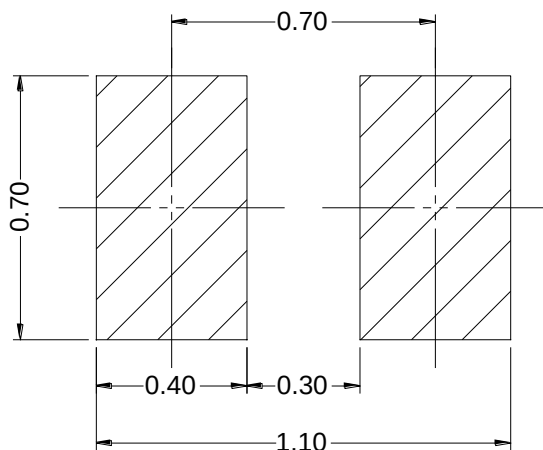
Package Outline Dimensions (Unit: mm)



DFN1006-2			
Dimension	Min.	Typ.	Max.
A	0.95	1.00	1.075
B	0.47	0.50	0.53
C	0.55	0.60	0.675
D	0.45	0.50	0.55
E	0.20	0.25	0.30
F	-	0.40	-
H	0	0.03	0.05

Mounting Pad Layout (Unit: mm)

DFN1006-2



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