

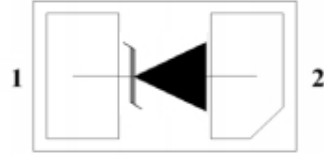
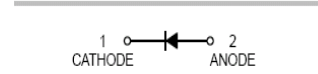
Features

- High reliability
- Low reverse current and low forward voltage
- RoHS compliant with Halogen-free

HF

Mechanical Data

- Case: DFN1610-2L
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin-Plated Leads, Solderability-per MIL-STD-202, Method 208



DFN1610-2L

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
B5819DH	DFN1610-2L	10000 pcs / Tape & Reel	SL

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Maximum RMS Voltage	V _{RMS}	28	V
DC Reverse Voltage	V _R	40	V
Maximum Average Forward Output Current	I _{F(AV)}	1	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	20	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance Junction-to-Air ^{*1}	R _{θJA}	125	°C/W
Thermal Resistance Junction-to-Lead ^{*1}	R _{θJL}	55	°C/W
Thermal Resistance Junction-to-Case ^{*1}	R _{θJC}	60	°C/W
Operating junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R = 1\text{mA}$	40	-	-	V
Forward Voltage *2	V_F	$I_F = 1\text{A}$	-	-	0.55	V
		$I_F = 3\text{A}$	-	-	0.90	V
Maximum Peak Reverse Current *3	I_R	$V_R = 40\text{V}$	-	-	5	μA
Junction Capacitance	C_J	$V_R = 4\text{V}, f = 1\text{MHz}$	-	40	-	pF

Notes:

1. The data tested by surface mounted on a 1 inch² FR-4 board with 2OZ copper
2. Pulse width $\leq 380\mu\text{s}$, Duty cycle < 2%
3. pulse test, $t_p \leq 5\text{ms}$

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

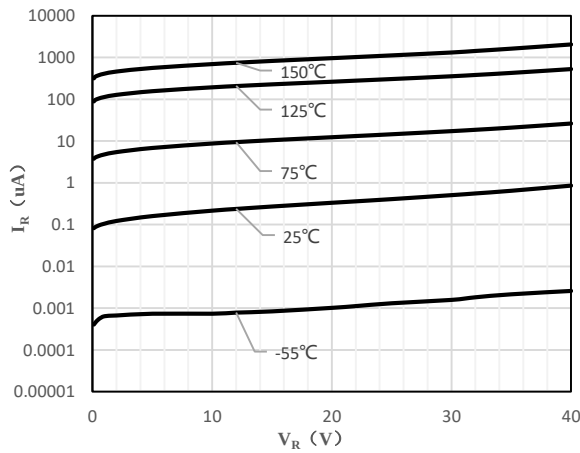


Fig 1 Typical Reverse Characteristic

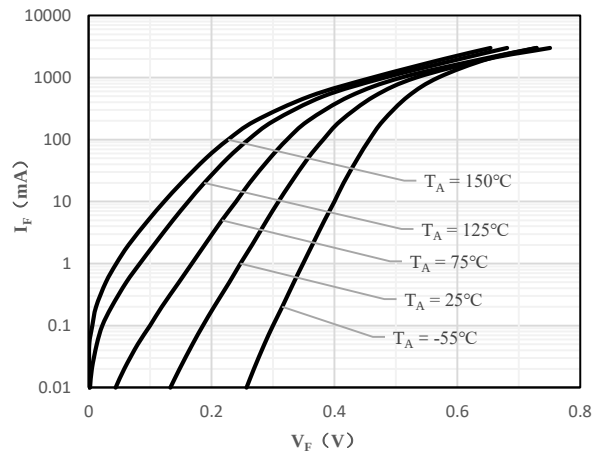


Fig 2 Typical Forward Characteristics

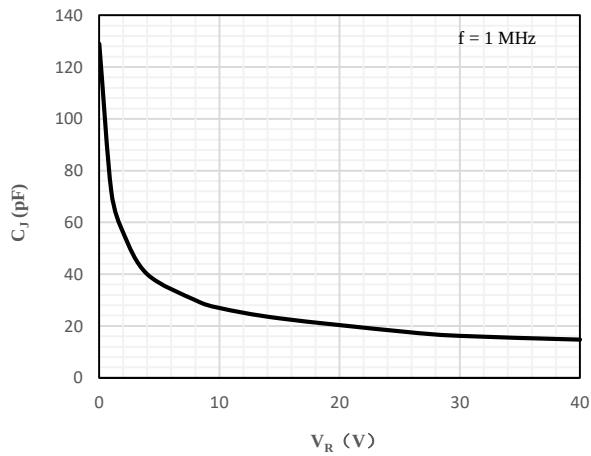


Fig 3 Capacitance Characteristics

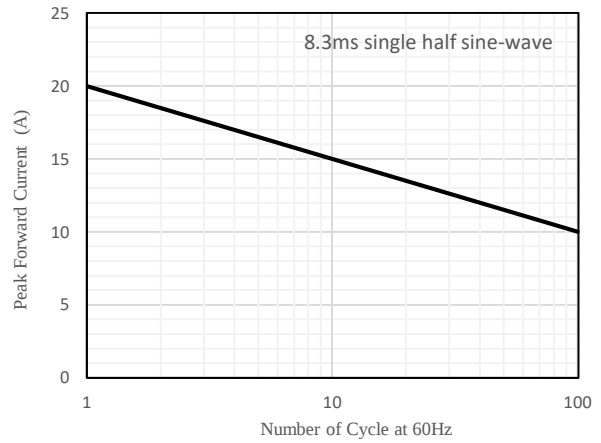


Fig 4 Surge Current Derating Curve

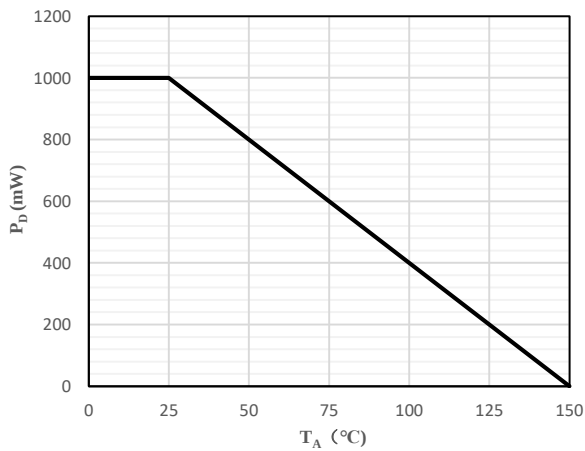


Fig 5 Power Derating Curve

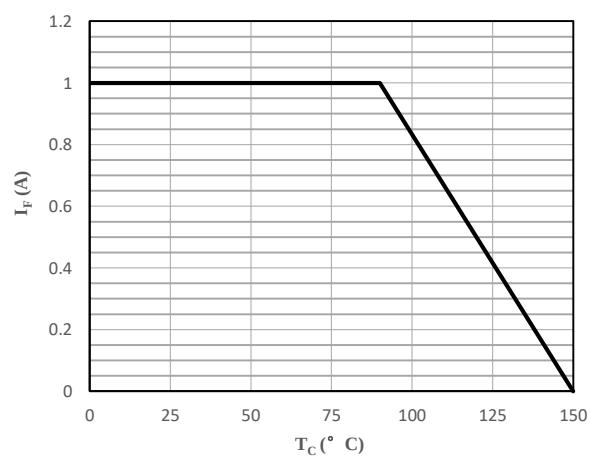
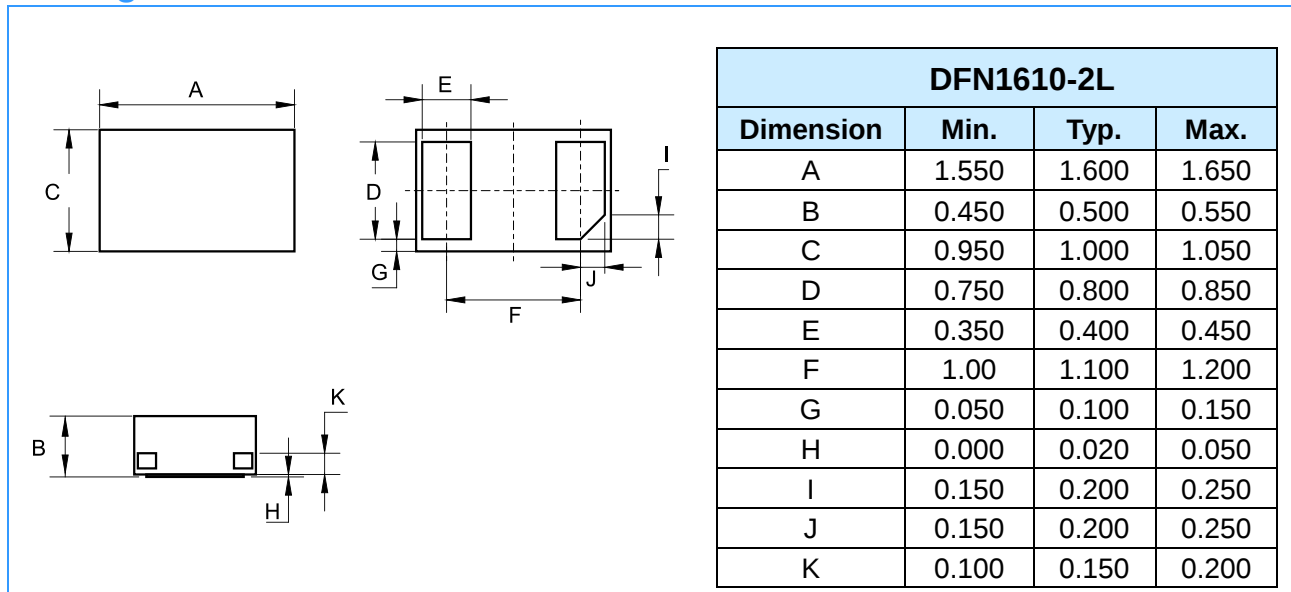


Fig 6 Current Derating Curve

Package Outline Dimensions (Unit: mm)



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