

Schottky Barrier Diode

PIN	DESCRIPTION
1	Cathode
2	Anode



Simplified outline SOD-123 and symbol

Absolute Maximum Ratings*

 $T_A = 25^\circ\text{C}$ unless otherwise noted

Rating	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM} V_{RWM} V_R	200	V
Maximum Average Forward Rectified Current	I_O	2.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FRM}	4.0	A
Non-Repetitive Peak Surge Current	I_{FSM}	30	A
Operating Junction Temperature Range Storage Temperature Range	T_{stg}, T_J	-55 to +150	$^\circ\text{C}$

Characteristic	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage (Note 4) ($I_F = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$) ($I_F = 2.0\text{ A}$, $T_J = 25^\circ\text{C}$) ($I_F = 1.0\text{ A}$, $T_J = 125^\circ\text{C}$) ($I_F = 2.0\text{ A}$, $T_J = 125^\circ\text{C}$)	V_F	0.86 0.94 0.71 0.78	V
Maximum Instantaneous Reverse Current (Note 4) (Rated dc Voltage, $T_J = 25^\circ\text{C}$) (Rated dc Voltage, $T_J = 125^\circ\text{C}$)	I_R	200 2	μA mA

Characteristic	Symbol	Value	Unit
Thermal Resistance, Junction-to-Lead (Note 2)	Ψ_{JCL}	23	$^\circ\text{C/W}$
Thermal Resistance, Junction-to-Ambient (Note 2)	$R_{\theta JA}$	85	$^\circ\text{C/W}$
Thermal Resistance, Junction-to-Ambient (Note 3)	$R_{\theta JA}$	330	$^\circ\text{C/W}$

Typical Characteristics

Fig.1 Forward Current Derating Curve

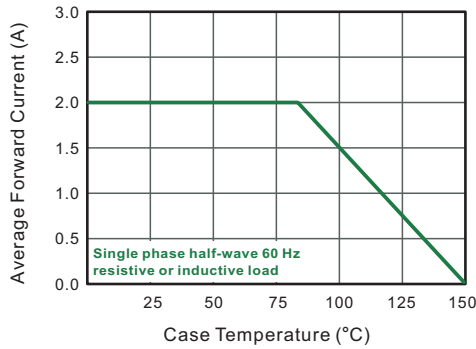


Fig.2 Typical Reverse Characteristics

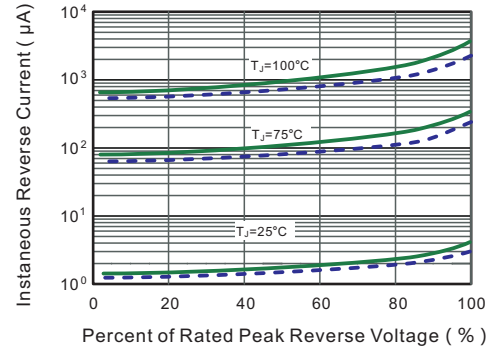


Fig.3 Typical Forward Characteristic

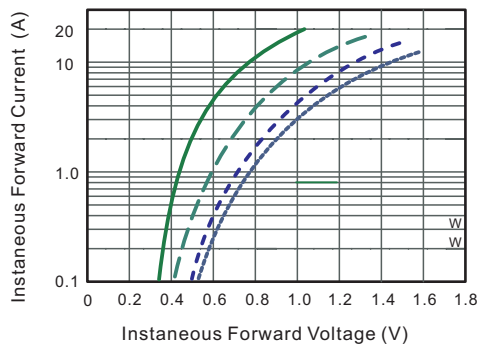


Fig.4 Typical Junction Capacitance

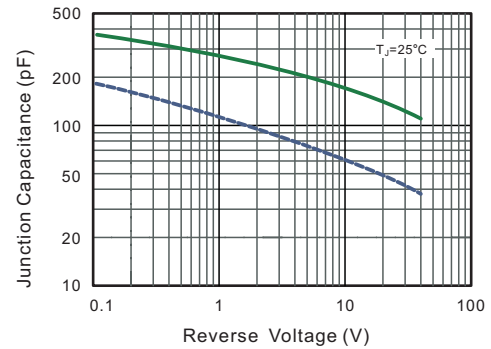


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

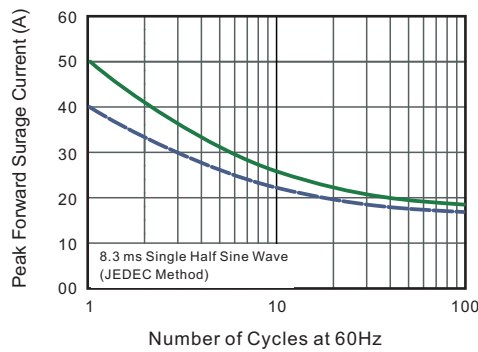
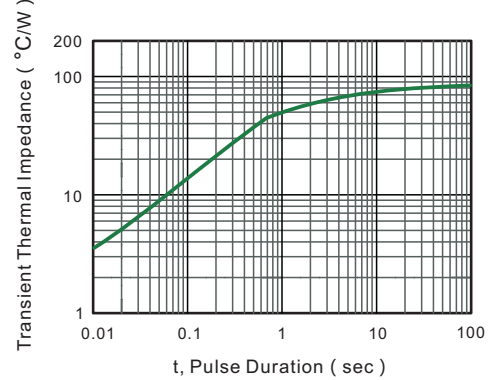


Fig.6- Typical Transient Thermal Impedance



Technical drawings of the 100-pin Quad Flat Pack (QFP) package. The drawings include a side view, a top view, and a bottom view. The side view shows the package height A, lead height C, and lead length H_E. The top view shows the package width D and length E. The bottom view shows the package width D and length E, with the lead pitch g and lead width e. The package is labeled with 'V01 A'.

UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	