AS1H05-NFLT

1.0A 600V General Purpose Rectifiers

Features

- Low forward voltage drop.
- Ideal for automated placement.
- Robust guarding for over voltage protection.
- Lead-free parts meet RoHS requirements.
- Compliant to Halogen-free.

Applications

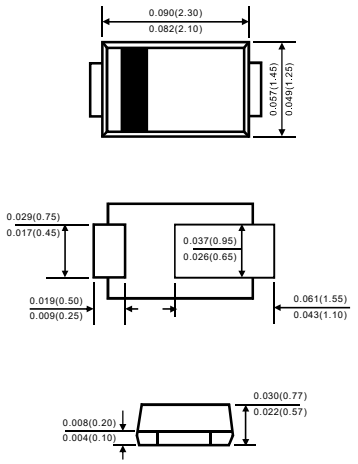
- DC to DC converter.
- Switching mode converters and inverters.

Mechanical data

- Epoxy:UL94-V0 rated flame retardant.
- Case : Molded plastic, SOD-323FLT.
- Polarity : Indicated by cathode band.

Package Outline

SOD-323FLT



Dimensions in inches and (millimeters)

Maximum ratings (At T_A=25℃ unless otherwise noted)

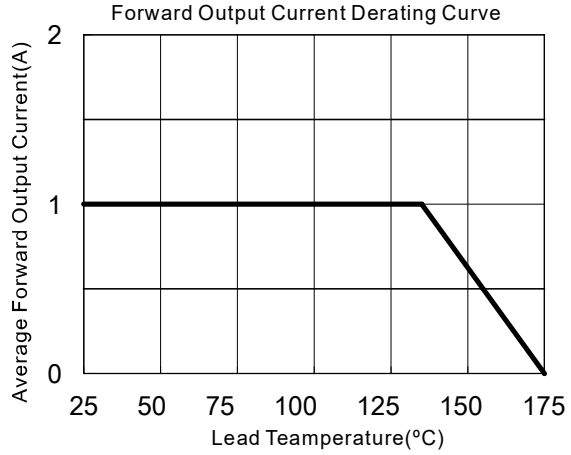
Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_{RRM}	600	V
RMS reverse voltage	V_{RMS}	420	V
Forward current	I_F	1	A
Peak forward surge current (8.3ms Single half sine-wave)	I_{FSM}	20	A
Typical thermal resistance, junction to ambient	$R_{\theta JA}$	200	℃/W
Typical thermal resistance, junction to lead	$R_{\theta JL}$	110	℃/W
Junction temperature	T_J	+175	℃
Storage temperature range	T_{STG}	-55 to +175	℃

Electrical characteristics (At T_A=25°C unless otherwise noted)

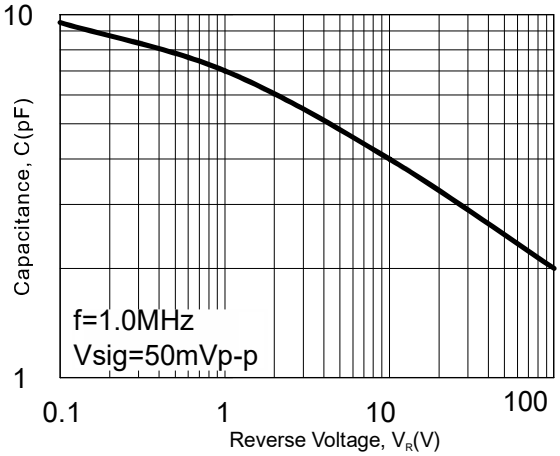
Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=1.0A	V_F			1.1	V
Reverse current	V_R=600V	I_R			1	μA
Junction Capacitance	V_R=4V, f=1MHz	C_J		5		pF
Reverse recovery time	I_F=0.5A, I_R=1A, I_{rr}=0.25A	t_{rr}		780		ns

Rating and characteristic curves

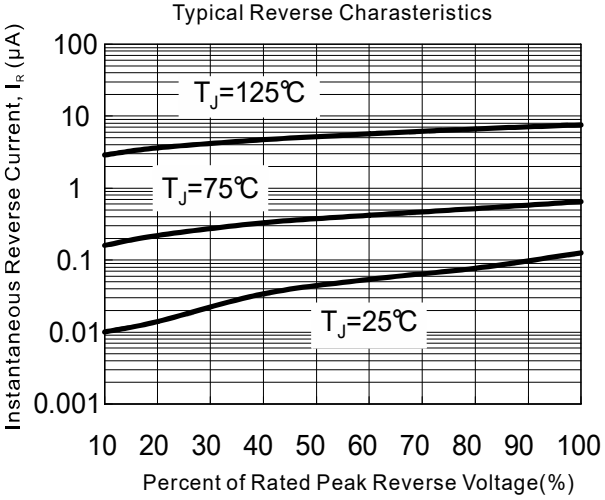
Forward Output Current Derating Curve



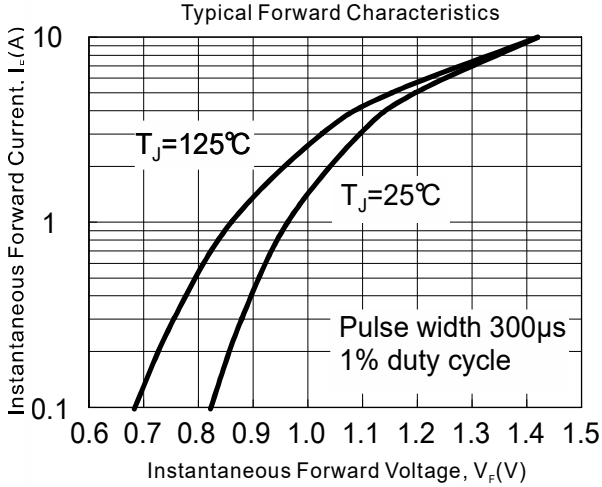
Typical Junction Capacitance



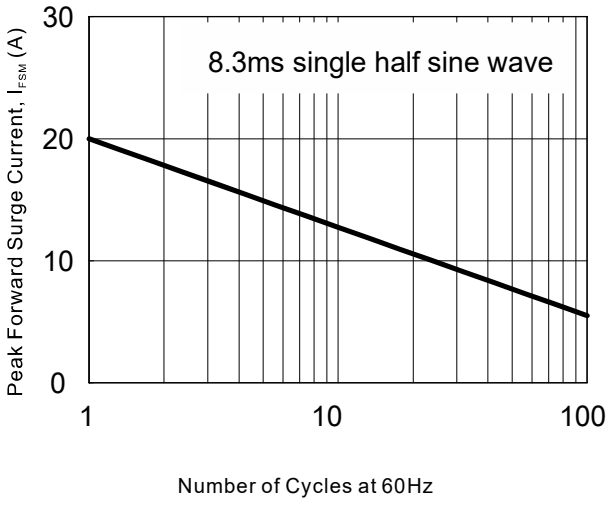
Typical Reverse Charasteristics



Typical Forward Characteristics



Maximum Non-Repetitive Peak Forward Surge Current



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AS-3010059	2025/05/09	2025/05/22	B	3

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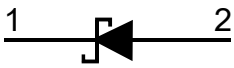
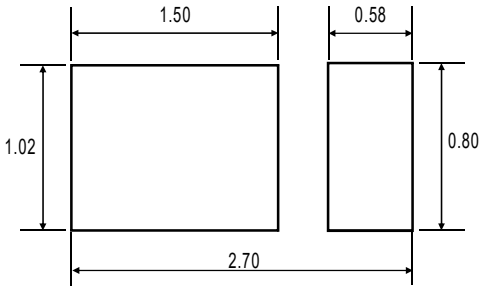
Pinning information

Pin	Simplified outline	Symbol
Pin1 Cathode Pin2 Anode		

Marking

Type number	Marking code
AS1H05-NFLT	A7

Suggested solder pad layout



Dimensions in millimeters