GSDSK32A Series

Surface Mount Schottky Barrier Rectifiers

Product Description

Reverse Voltage 20V to 200V
Forward Current 3.0A

Features

- Ultra-high-speed switching.
- High current capacity
- Low profile package
- High surge capacity
- Low power loss, high efficiency
- Halogen-free parts.

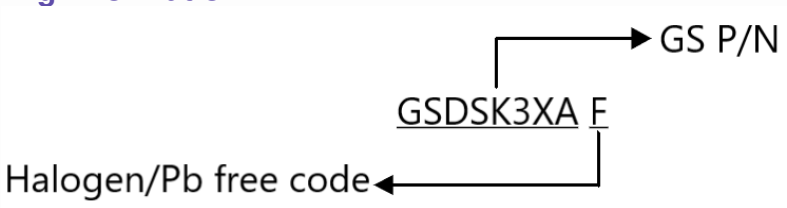
Mechanical Data

- Case : Molded plastic, SMAF
- Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
- Polarity : Indicated by cathode band
- Mounting Position : Any

Packages

SMAF

Ordering Information



Part Number	Package	Quantity Reel
GSDSK3XAF	SMAF	10000 PCS

Marking Information

P/N	Part Marking	Package
GSDSK32AF	S32	SMAF
GSDSK33AF	S33	SMAF
GSDSK34AF	S34	SMAF
GSDSK35AF	S35	SMAF
GSDSK36AF	S36	SMAF
GSDSK38AF	S38	SMAF
GSDSK310AF	S310	SMAF
GSDSK315AF	S315	SMAF
GSDSK320AF	S320	SMAF

Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60HZ, resistive or inductive load.
For capacitive load, derate current by 20%.

Symbol	Conditions		GSDSK32AF	GSDSK33AF	GSDSK34AF	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		20	30	40	V
V_{RMS}	Maximum RMS Voltage		14	21	28	V
V_{DC}	Maximum DC Blocking Voltage		20	30	40	V
V_F	Maximum Instantaneous I_F=3.0A		0.50			V
I_F	Maximum Average Forward Rectified Current		3.0			A
I_{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load		80			A
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage	T_A= 25°C	0.5			mA
		T_A= 100°C	20			
$R_{\theta JA}$	Typical Thermal Resistance		60			°C/W
$R_{\theta JC}$			30			°C/W
C_J	Junction Capacitance		380			pF
T_J	Operating Junction Temperature Range		-55 to +125			°C
T_{STG}	Storage Temperature Range		-65 to +150			°C

Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60HZ, resistive or inductive load.
For capacitive load, derate current by 20%.

Symbol	Conditions	GSDSK35AF	GSDSK36AF	GSDSK38AF	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	60	80	V
V_{RMS}	Maximum RMS Voltage	35	42	56	V
V_{DC}	Maximum DC Blocking Voltage	50	60	80	V
V_F	Maximum Instantaneous I_F=3.0A	0.75		0.85	V
Symbol	**Conditions**	**GSDSK310AF**	**GSDSK315AF**	**GSDSK320AF**	**Unit**
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	100	150	200	V
V_{RMS}	Maximum RMS Voltage	71	105	140	V
V_{DC}	Maximum DC Blocking Voltage	100	150	200	V
V_F	Maximum Instantaneous I_F=3.0A	0.85	0.95		V
I_F	Maximum Average Forward Rectified Current	3.0			A
I_{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	80			A
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage, T_A= 25°C	0.5			mA
	T_A= 100°C	20			
$R_{\theta JA}$	Typical Thermal Resistance	60			°C/W
$R_{\theta JC}$		30			°C/W
C_J	Junction Capacitance	380			pF
T_J	Operating Junction Temperature Range	-55 to +150			°C
T_{STG}	Storage Temperature Range	-65 to +150			°C

Typical Characteristics

FIG.1 FORWARD CURRENT DERATING CURVE

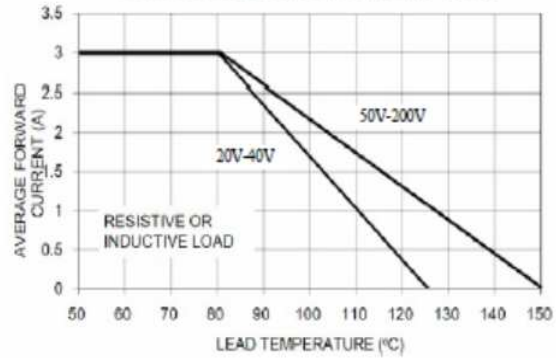


FIG. 2 MAXIMUM FORWARD SURGE CURRENT

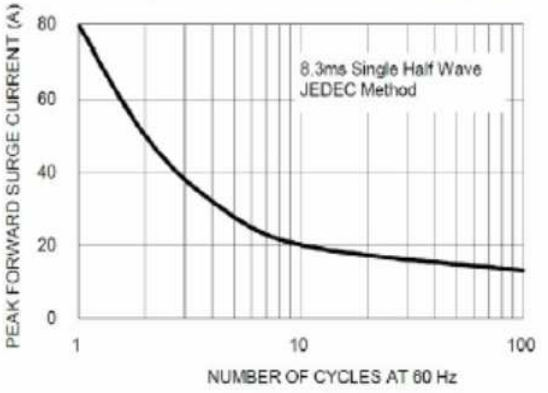


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

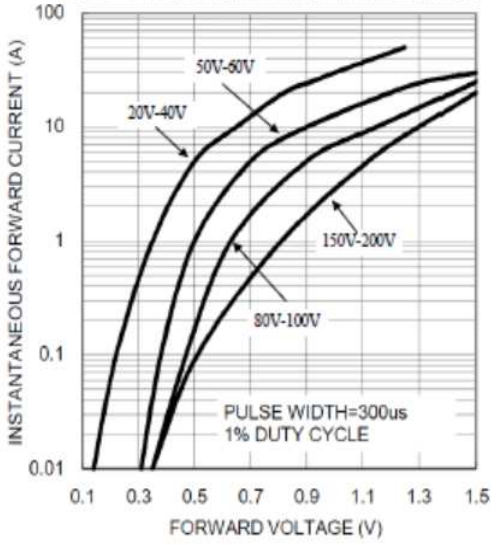
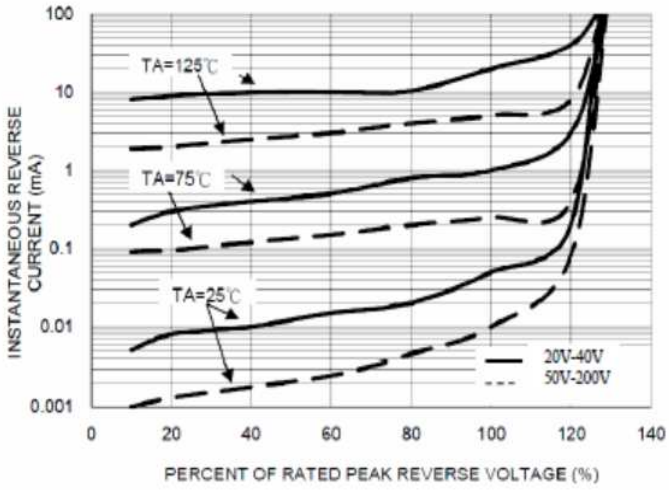
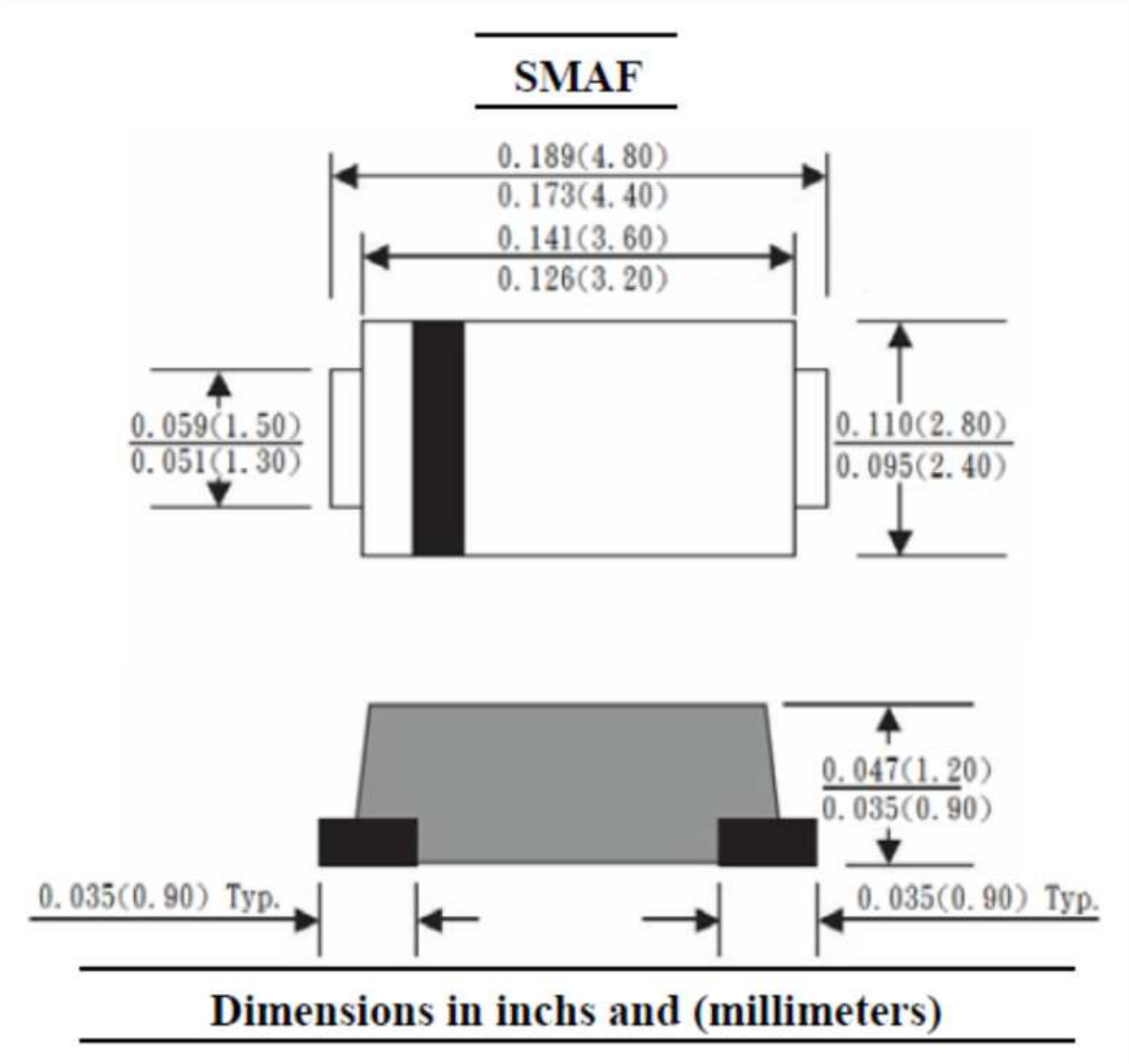


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



Package Dimension



NOTICE

Information furnished is believed to be accurate and reliable. However Globaltech Semiconductor assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Globaltech Semiconductor. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information without express written approval of Globaltech Semiconductor.

CONTACT US

GS Headquarter	
	4F.,No.43-1,Lane11,Sec.6,Minquan E.Rd Neihu District Taipei City 114, Taiwan (R.O.C)
	886-2-2657-9980
	886-2-2657-3630
@	sales_twn@gs-power.com

RD Division	
	824 Bolton Drive Milpitas. CA. 95035
	1-408-457-0587