沛倫股份有限公司
Compact Technology Corp.

GUS2A thru GUS2M

ULTRA FAST
GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 2.0** Ampere

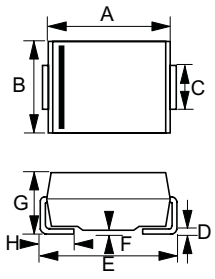
FEATURES

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Fast reverse recovery time
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case : SMB
- Polarity : Color band denotes cathode
- Weight : 0.095 grams
- Mounting position : Any

SMB



SMB		
DIM.	MIN.	MAX.
A	4.06	4.70
B	3.30	3.94
C	1.91	2.11
D	0.15	0.31
E	5.08	5.59
F	0.05	0.20
G	2.13	2.44
H	0.76	1.52
All Dimensions in millimeter		

MAXIMUM RATINGS AND 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%

PARAMETER	SYMBOL	GUS 2A	GUS 2B	GUS 2D	GUS 2G	GUS 2J	GUS 2K	GUS 2M	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I_F	2.0							A
Peak forward surge current, 8.3ms single half sine-wave superim posed on rated load	I_{FSM}	50.0							A
Maximum instantaneous I_F=2A@ 25℃	V_F	1.0			1.30	1.70			V
Maximum DC Reverse Current @TA=25℃ at Rated DC Blocking Voltage @TA=100℃	I_R	5 100							uA
Typical Junction Capacitance(Note1)	C_J	30				20			pF
Maximum Reverse Recovery Time(Note2)	Trr	50.0				75.0			nS
Typical Thermal Resistance	$R_{\theta JA}$	38							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note1: Measured 1.0MHZ and applied reverse voltage of 4.0 VDC

Note2: Measured with IF=0.5A, IR=1A, IRR=0.25A

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

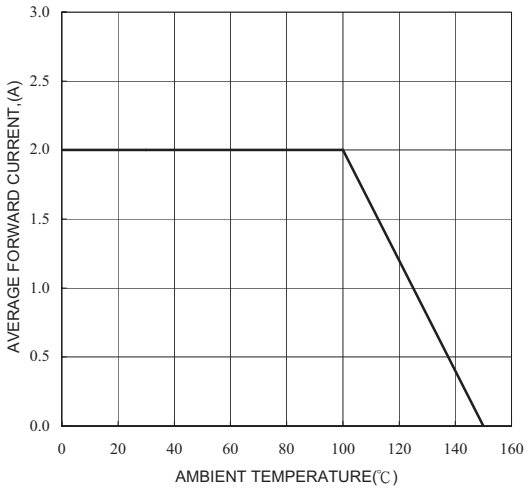


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

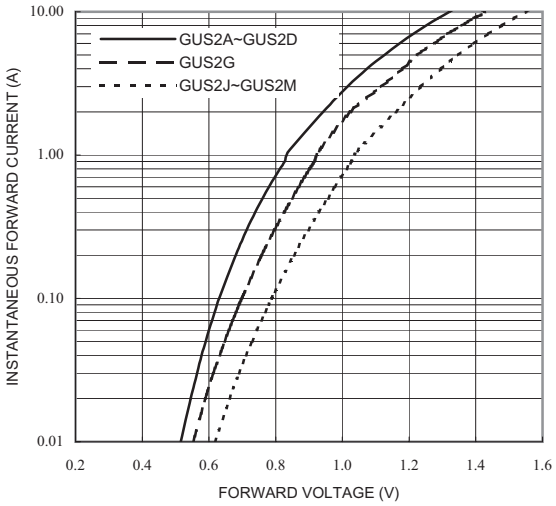


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

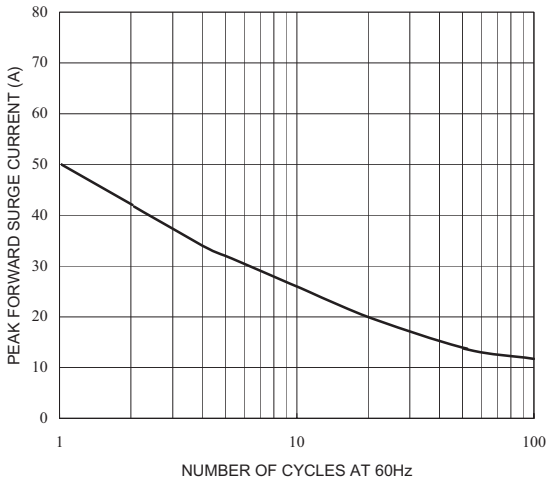


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

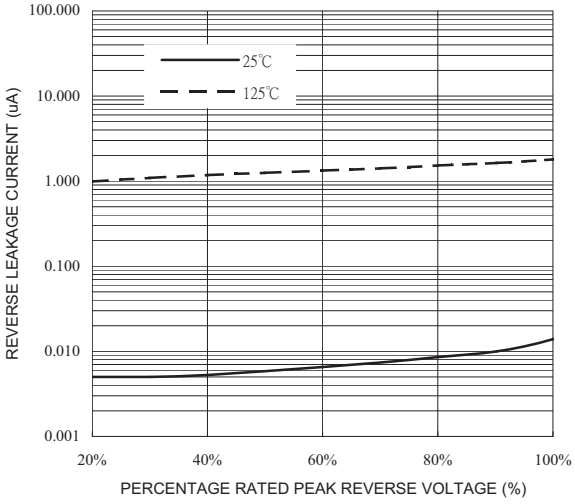


FIG. 5-TYPICAL JUNCTION CAPACITANCE