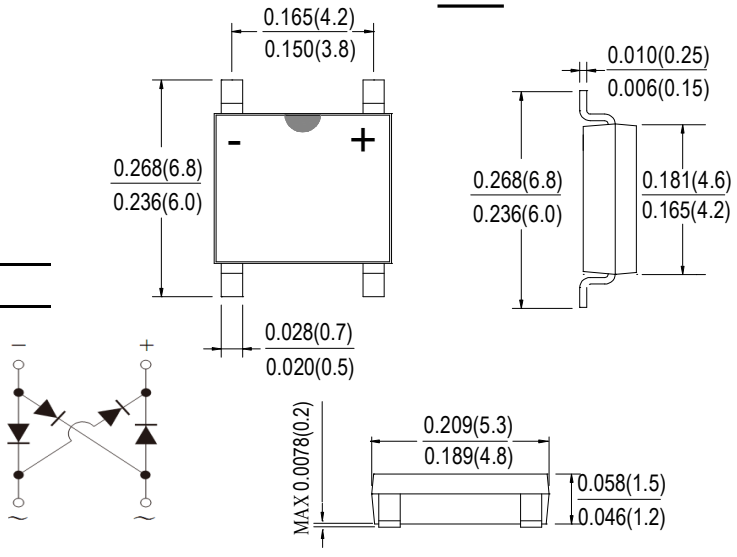
KABS12 THRU KABS125

SINGLE PHASE1.0 AMP SURFACE MOUNTSCHOTTKY BRIDGE RECTIFIER

Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 30A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

ABS



Dimensions in inches and (millimeters)

Mechanical Data

- Case: SOPA-4, molded plastic ABS
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number

Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER	SYMBOL	KABS 12	KABS 13	KABS 14	KABS 145	KABS 15	KABS 16	KABS 18	KABS 110	KABS 115	KABS 120	KABS 125	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V
RMS Reverse Voltage	V_{RMS}	14	21	28	31	35	42	56	70	135	140	175	V
Average Rectified Output Current @T_C =100℃	IF(AV)	1.0											A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30											A
Rating for fusing (t<8.3ms)	I^2t	3.74											A^2s
Forward Voltage per element @IF=1.0A	V_{FM}	0.5				0.7		0.85		0.90		0.92	V
Peak Reverse Current @T_A =25℃ At Rated DC Blocking Voltage @T_A =100℃	I_R	0.1 10						0.05 5					mA
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	50 10											℃/W
Operating junction temperature range	T_J	-55to+150											℃
Operating and Storage Temperature Range	T_{STG}	-55to+150											℃

Note:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

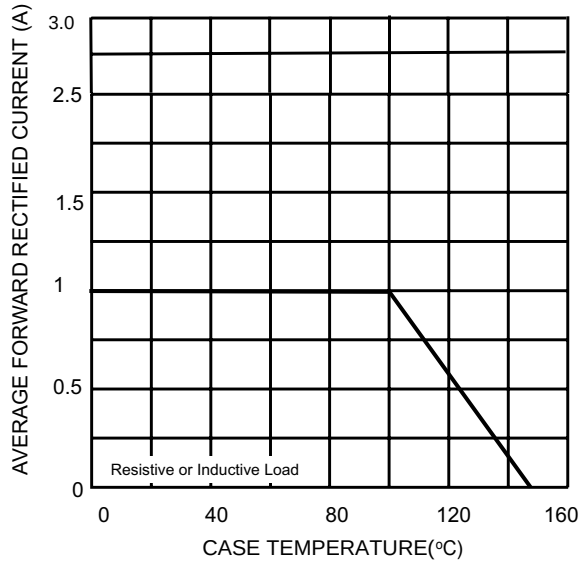


Fig. 2 Typical Forward Characteristics (per leg)

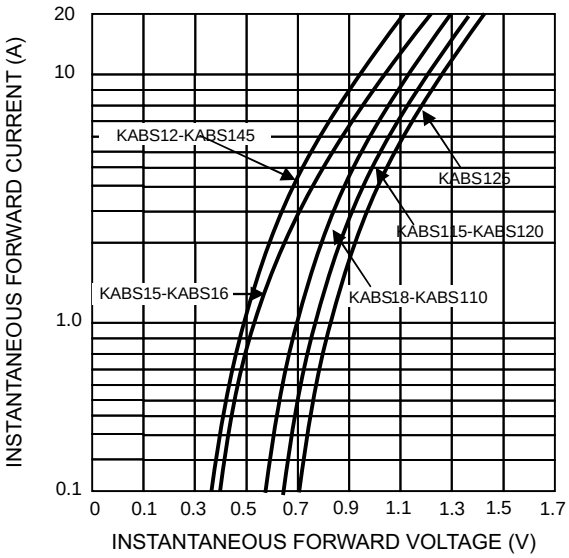


Fig. 3 Maximum Peak Forward Surge Current (per leg)

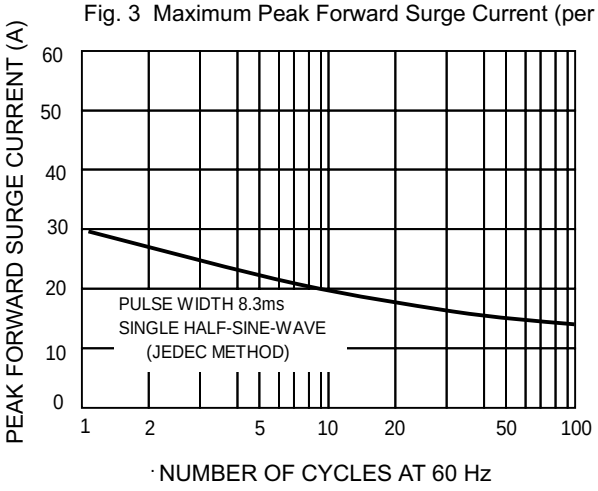


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

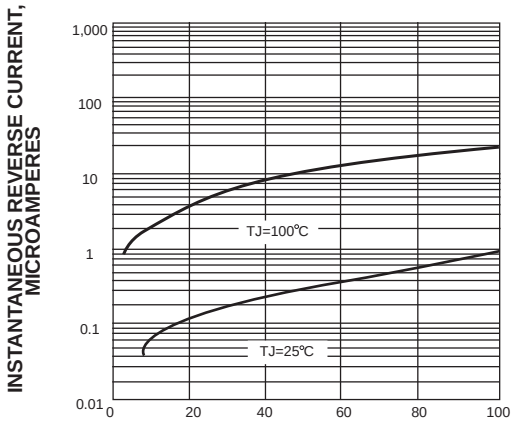
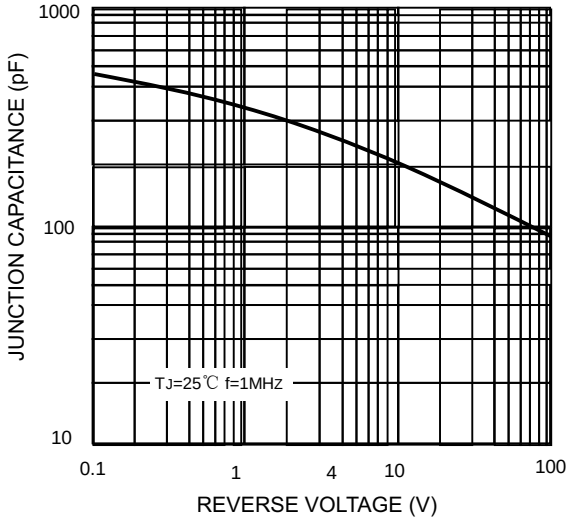
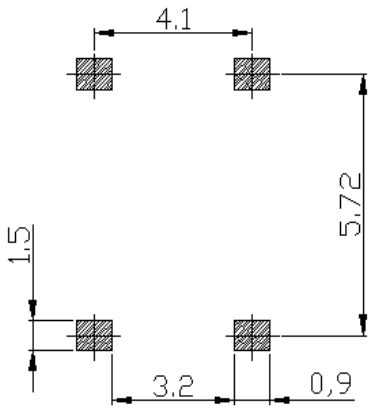


Fig. 5 Typical Junction Capacitance



ABS PAD LAYOUT



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