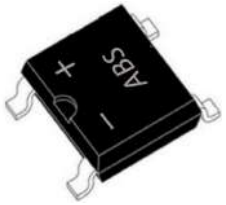
ABS Plastic-Encapsulate Bridge Rectifier

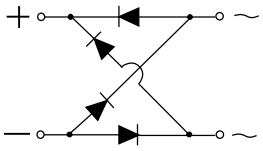
Single Phase 5.0Amp Schottky Bridge Rectifiers

Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Metel-Silicon Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250℃/10 seconds at terminals

ABS





Mechanical Data

Case : Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.0034 ounce, 0.098 grams

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 current derate by 20%.

Parameter	SYMBOLS	KABS54	KABS56	KABS58	KABS510	KABS515	KABS520	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	40	60	80	100	150	200	V
Maximum average forward rectified current at T_L=100℃	$I_{(AV)}$	5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120.0						A
Maximum instantaneous forward voltage at 5.0A	V_F	0.55	0.70	0.85		0.95		V
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=100℃	I_R	0.20 20.0		0.05 5.0				mA
Rating for fusing (t=8.3ms, Ta=25℃)	I^2t	26.5						A^2s
Typical thermal resistance	R_{qJA}	80.0						°C/W
Operating junction temperature range	T_J	-55 to +150						°C
Storage temperature range	T_{STG}	-55 to +150						°C

Typical Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

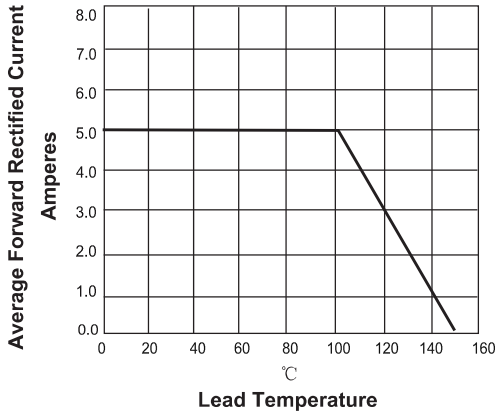


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

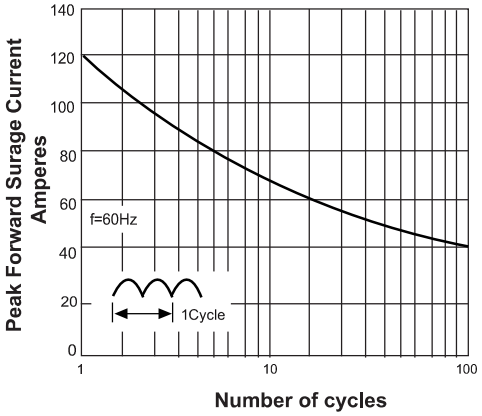


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

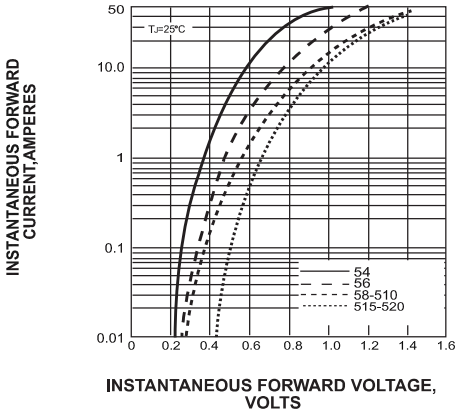
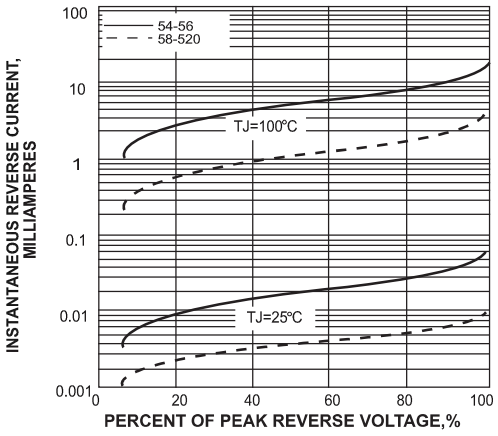
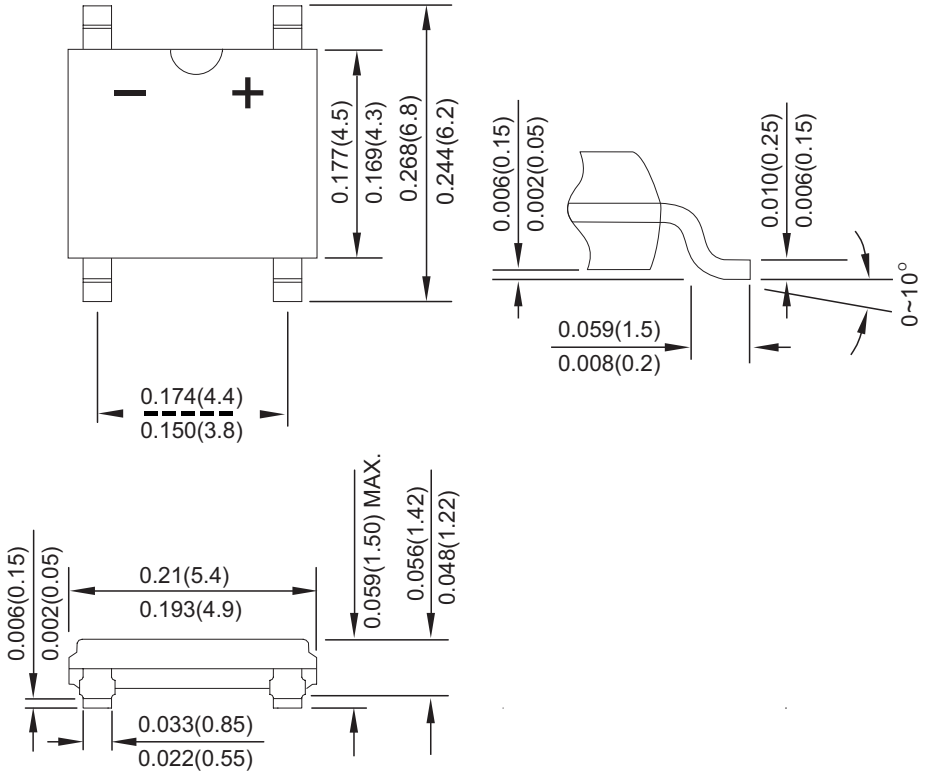


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

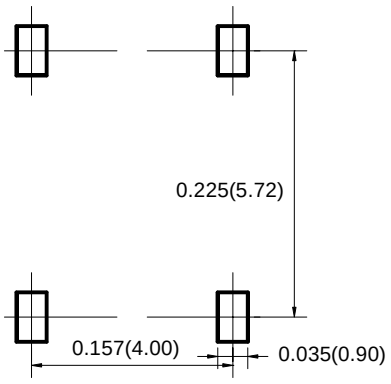


ABS Package Outline Dimensions



Dimensions in inches and (millimeters)

ABS Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

Reel Taping Specifications For Surface Mount Devices-ABS

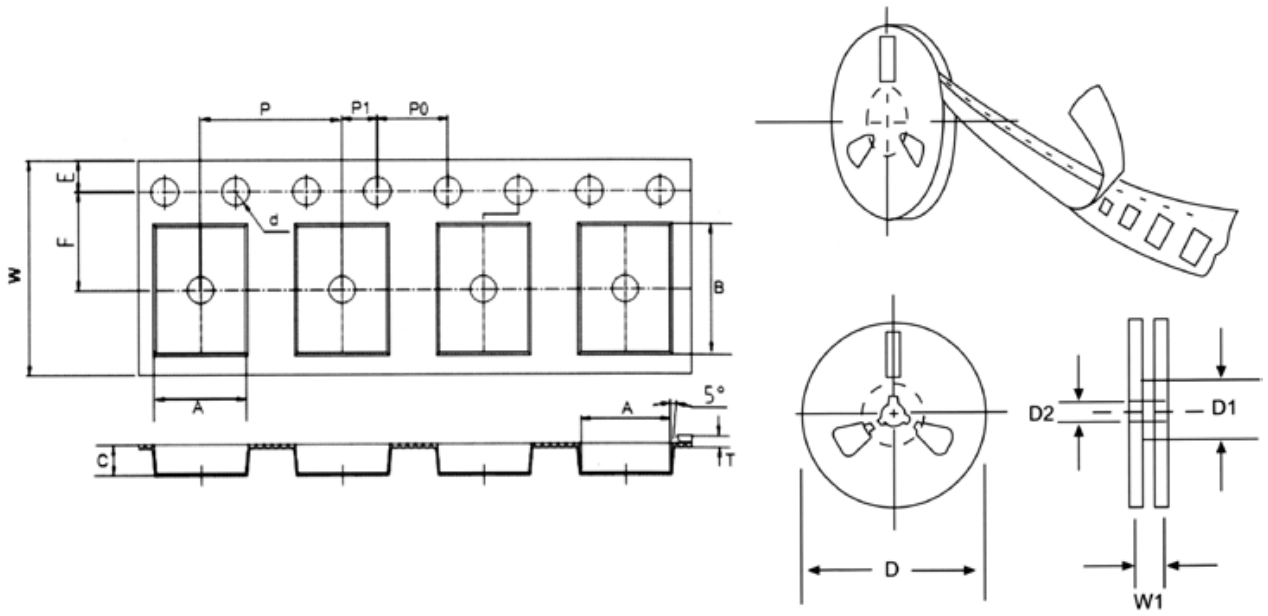


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	ABS mm(inch)
Carrier width	A	5.40+0.1(0.213+0.004)
Carrier length	B	6.90+0.05(0.272+0.002)
Carrier depth	C	2.10+0.1(0.083+0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	279±2.0 (11± 0.079)
Reel inner diameter	D1	75 ±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13+0.5(0.512+0.020)
Stroket hole position	E	1.75+0.1(0.069+0.004)
Punch hole position	F	5.5+0.05(0.217+0.002)
Punch hole pitch	P	8.0+0.1(0.315+0.004)
Sprocket hole pitch	P0	4.0+0.1(0.157+0.004)
Embossment center	P1	2.0+0.1(0.079+0.004)
Totall tape thickness	T	0.10-0.70(0.004-0.028)
Tape width	W	12.0+0.3/-0.1(0.472+0.004)
Reel width	W1	16.8+2.0(0.661+0.079)

NOTE:Devices are packde in accordance with EIA standard RS-481-A and specification given above.