

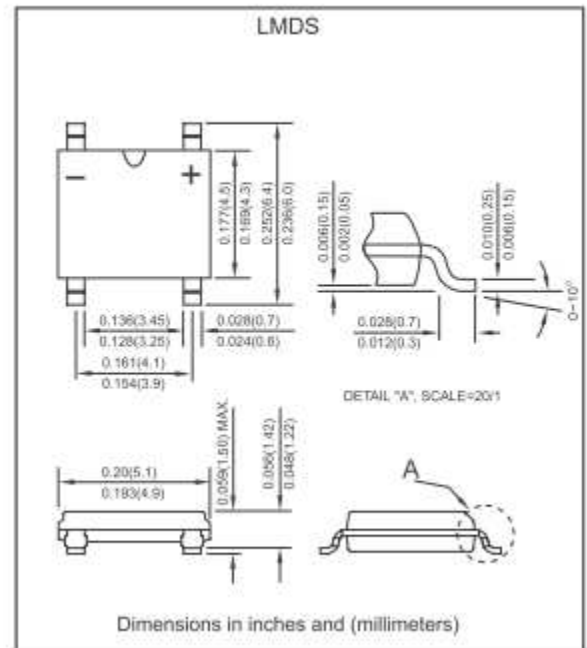
## Features

- ◆ Glass passivated junction
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ◆ High surge current capability
- ◆ Suffix "-H" indicates Halogen-free part, ex.ECCBRABS2-6-H.

## Mechanical Data

- ◆ Epoxy:UL94-V0 rated flame retardant
- ◆ Case : Molded plastic, LMDS
- ◆ Terminals : Solder plated, solderable per  
MIL-STD-202, Method 208
- ◆ Polarity : marked on body
- ◆ Mounting Position : Any
- ◆ Weight : Approximated 0.0992 gram

## Package outline



## Maximum ratings and Electrical Characteristics (At $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOLS	ABS2-6	ABS4-6	ABS6-6	ABS8-6	ABS10-6	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward rectified current On aluminum substrate	$I_o$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave (JEDEC Method)	$I_{FSM}$	30					A
Maximum instantaneous forward voltage at $I_F=1.0A$	$V_F$	1.1					V
Rating for fusing $t < 8.3$ ms	$I^2t$	3.7					A <sup>2</sup> s
Maximum DC reverse current $T_J=25^\circ\text{C}$ At rated DC blocking voltage $T_J=125^\circ\text{C}$	$I_R$	5.0 500					$\mu\text{A}$
Typical thermal resistance junction to ambient	$R_{\theta JA}$	80					$^\circ\text{C}/\text{W}$
Typical thermal resistance junction to lead	$R_{\theta JL}$	25					
Operating junction temperature range	$T_J$	-55 to +150					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150					$^\circ\text{C}$

## Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

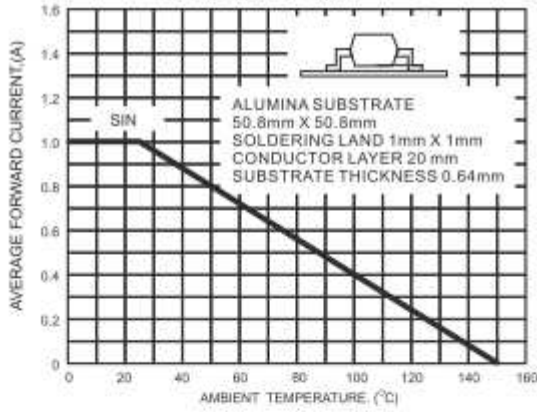


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

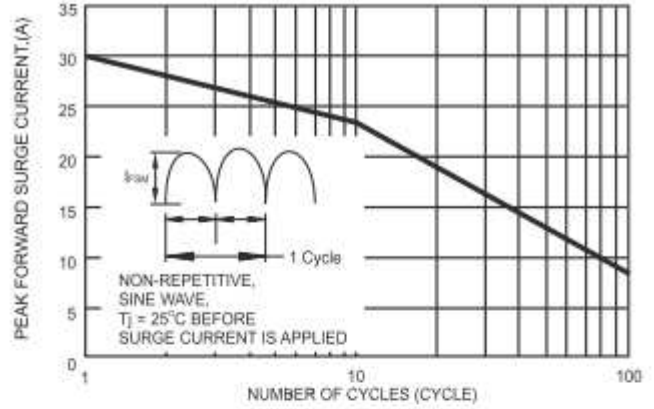


FIG.3-TYPICAL FORWARD CHARACTERISTICS

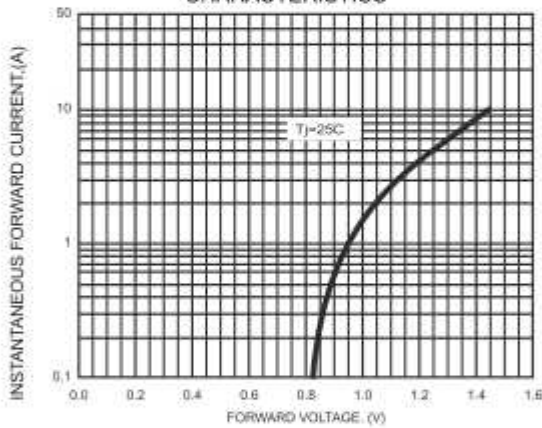


FIG.4-TYPICAL REVERSE CHARACTERISTICS

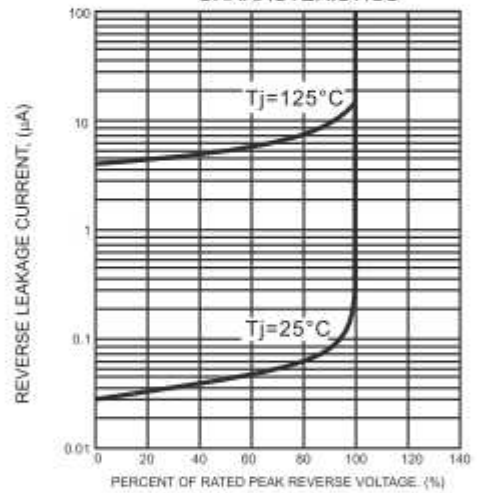
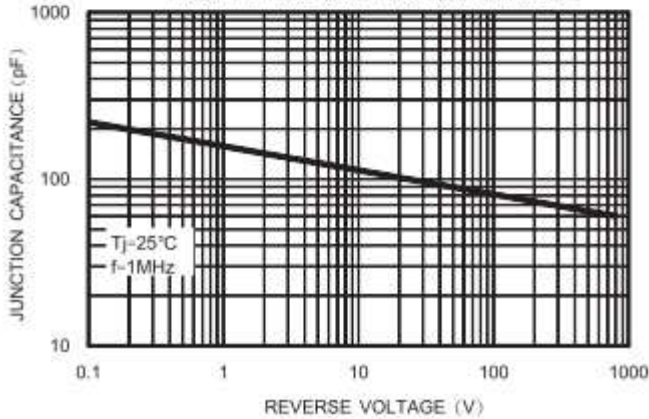
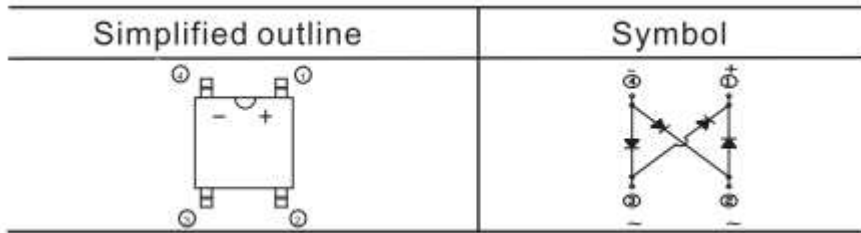


FIG.5-TYPICAL JUNCTION CAPACITANCE



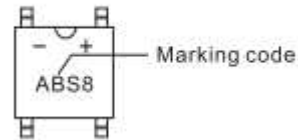
## Pinning information



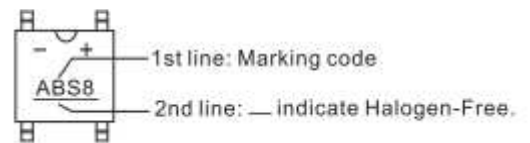
## Marking

Part No	Marking
ECCBRABS2-6 / ECCBRABS2-6-H	ABS2
ECCBRABS4-6 / ECCBRABS4-6-H	ABS4
ECCBRABS6-6 / ECCBRABS6-6-H	ABS6
ECCBRABS8-6 / ECCBRABS8-6-H	ABS8
ECCBRABS10-6 / ECCBRABS10-6-H	ABS10

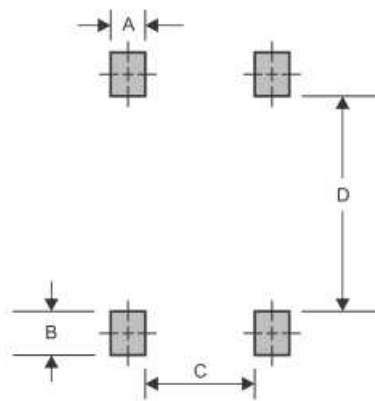
1. For Halogen Device



2. For Halogen-free Device



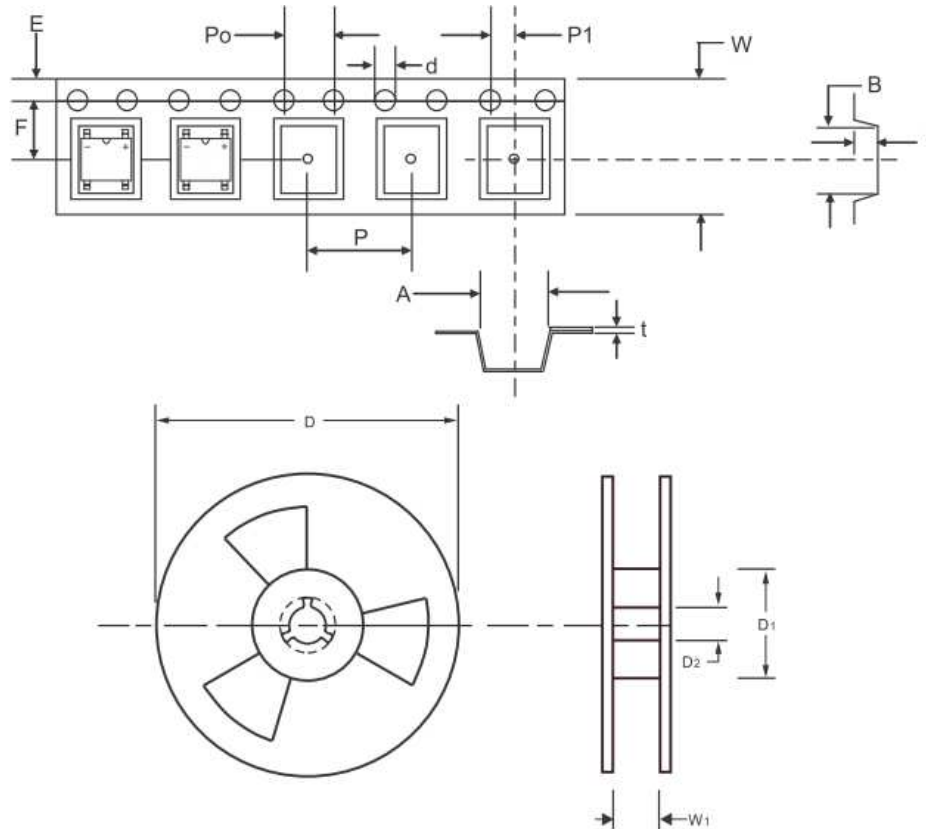
## Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C	D
LMDS	0.032 (0.80)	0.032 (0.80)	0.132 (3.35)	0.193 (4.90)

## Packing information



unit:mm

Item	Symbol	Tolerance	LMDS
Carrier width	A	0.1	5.31
Carrier length	B	0.1	6.68
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D <sub>1</sub>	min	50.00
7" Reel outside diameter	D	2.0	-
7" Reel inner diameter	D <sub>1</sub>	min	-
Feed hole diameter	D <sub>2</sub>	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.05	5.50
Punch hole pitch	P	0.1	8.00
Sprocket hole pitch	P <sub>0</sub>	0.1	4.00
Embossment center	P <sub>1</sub>	0.05	2.00
Overall tape thickness	t	0.1	0.30
Tape width	W	0.3	12.00
Reel width	W <sub>1</sub>	1.0	12~14.4

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

## Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
LMDS	13"	5,000	8.0	10,000	337*337*37	330	350*330*360	80,000	19.0