



ABS15x Series



SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



ABS

PRIMARY CHARACTERISTICS		
I_F	1.5	A
V_{RRM}	100~1000	V
I_{FSM}	50	A
V_F	1	V
$T_J \text{ max}$	150	°C

Features
<ul style="list-style-type: none"> • Glass passivated die construction • Low forward voltage drop • High current capability • High surge current capability • Designed for surface mount application • Plastic material-UL flammability 94

Mechanical Data
<ul style="list-style-type: none"> • Case: SOPA-4, molded plastic ABS • Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208 • Polarity: as Marking on case • Mounting position: Any • Weight: 0.092 grams (approximate)

Ordering Information	
Part Number	Remark
ABS15x	General
ABS15x-H	Halogen Free
ABS15x-Q	Automotive

MAXIMUM RATINGS (TA=25°C unless otherwise noted)								
PARAMETER	SYMBOL	ABS152	ABS153	ABS154	ABS155	ABS156	ABS157	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}							V
Maximum RMS voltage	V_{RMS}	100	200	400	600	800	1000	V
Maximum DC blocking voltage	V_{DC}							V
Maximum average forward rectified current	I_F	1.5						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50						A
Rating for fusing (t<8.3ms)	I^2t	10.375						A ² s
Forward Voltage per element@IF=0.75A @IF=1.5A	V_{FM}	0.95 1.00						V
Maximum DC Reverse Current @ Tc=25°C At Rated DC Blocking Voltage @ Tc=100°C	I_R	5 200						uA
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25						°C/W
Operating and Storage Temperature Range	T_J	-55 to +150						°C
Making code		ABS152	ABS153	ABS154	ABS155	ABS156	ABS157	UNIT



SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Rating and Characteristics Curvers

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

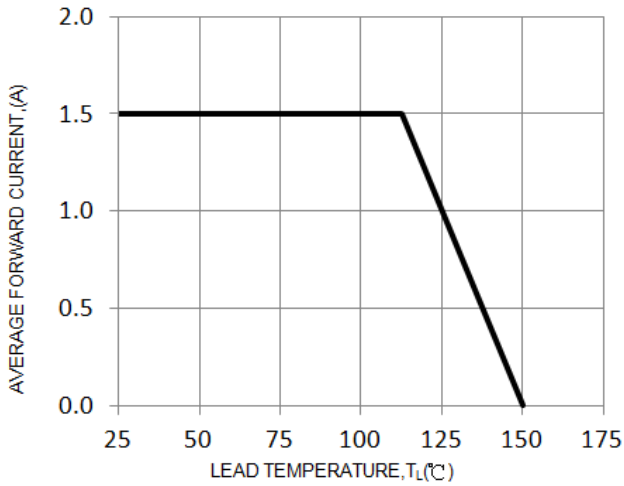


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

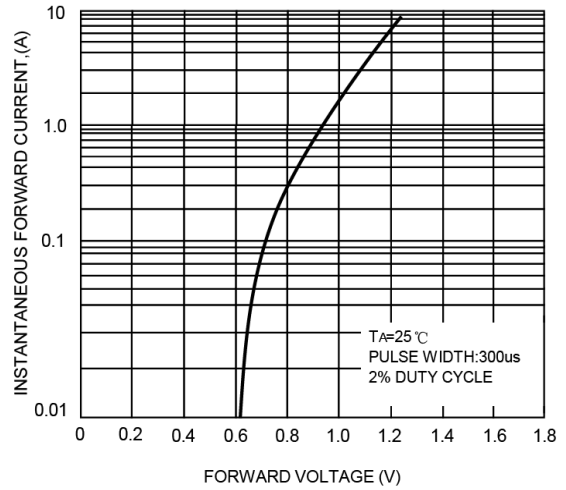


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

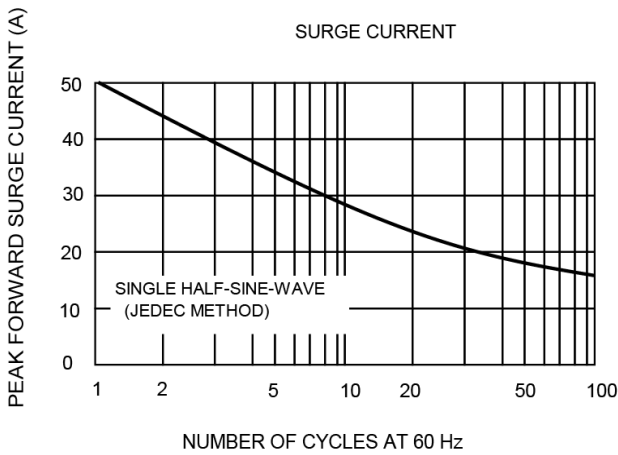
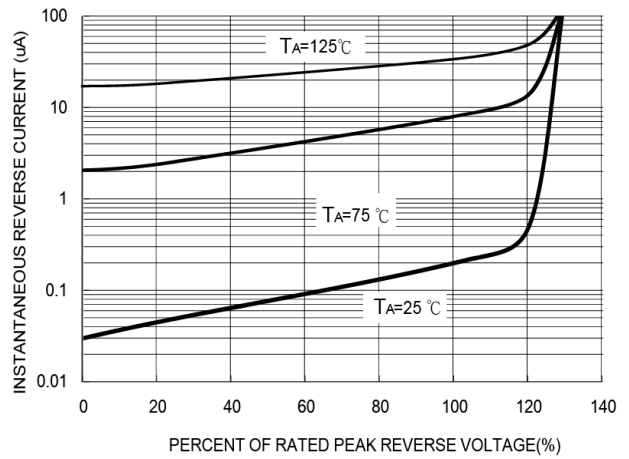


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



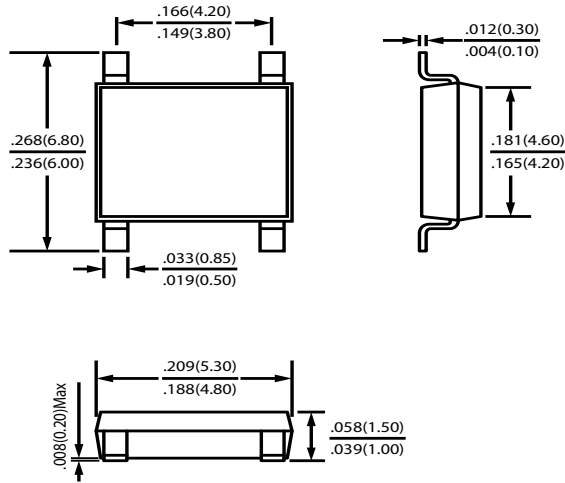


ABS15x Series



SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Package Outline Dimensions

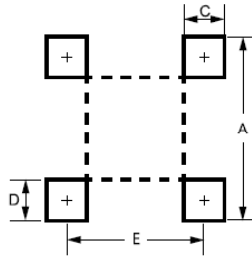


ABS

Dimensions in inches and (millimeters)

Suggested Pad Layout

Dimension	Outline	ABS millimeters
A		5.72
C		0.90
D		1.50
E		4.10



Tape & Reel Specification

ITEM	SYMBOL	ABS(mm)
Carrier width	A	5.31±0.10
Carrier length	B	6.68±0.10
Carrier depth	C	1.59±0.10
Sprocket hole	d	1.55±0.05
Reel outside diameter	D	330±2.0
Feed hole diameter	D0	14±1.0
Reel inner diameter	D1	75±1.0
Sprocket hole position	E	1.75±0.10
Punch hole position	F	5.5±0.05
Sprocket hole pitch	P	8.0±0.10
Sprocket hole pitch	P0	4.0±0.10
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.27±0.10
Tape width	W	12.0±0.15
Reel width	W1	13.5±1.0

