

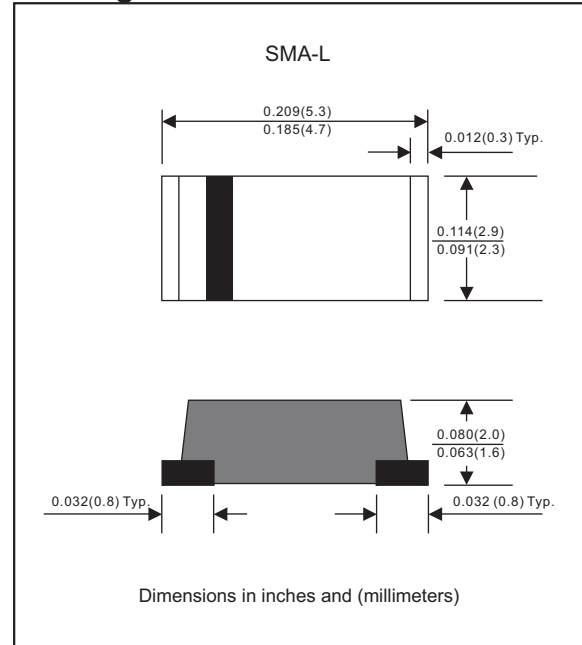
Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance
- Low profile surface mounted application in order to optimize board space
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guardring for overvoltage protection
- Ultra high-speed switching
- Silicon epitaxial planar chip, metal silicon junction
- Lead-free parts meet RoHS requirements
- Suffix "-H" indicates Halogen free parts, ex. AS320-AL-H

Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMA-L
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.05 gram

Package outline



Maximum ratings (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOLS	AS 320-AL	AS 330-AL	AS 340-AL	AS 350-AL	AS 360-AL	AS 380-AL	AS 3100-AL	AS 3150-AL	AS 3200-AL	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum continuous reverse voltage	V_R	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	I_O	3.0									A	
Non-repetitive peak forward surge current 8.3ms single half sine-wave	I_{FSM}	80									A	
Typical junction capacitance (Note 1)	C_J	250									pF	
Operating junction temperature range	T_J	-55 to +125				-55 to +150						$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-65 to +175										$^{\circ}\text{C}$

Electrical characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOLS	AS 320-AL	AS 330-AL	AS 340-AL	AS 350-AL	AS 360-AL	AS 380-AL	AS 3100-AL	AS 3150-AL	AS 3200-AL	UNIT	
Maximum instantaneous forward voltage at $I_F=3.0\text{A}$	V_F	0.475	0.50		0.70		0.85	0.90	0.92	V		
Maximum reverse leakage current at rated V_R	I_R						0.5					mA
							20					mA

Thermal characteristics

PARAMETER	SYMBOLS	AS 320-AL	AS 330-AL	AS 340-AL	AS 350-AL	AS 360-AL	AS 380-AL	AS 3100-AL	AS 3150-AL	AS 3200-AL	UNIT	
Typical thermal resistance junction to ambient (Note2)	$R_{\theta JA}$						52					$^{\circ}\text{C/W}$
Typical thermal resistance junction to case (Note 2)	$R_{\theta JC}$						26					$^{\circ}\text{C/W}$

Notes1: Measured at 1MHz and applied reverse voltage of 4.0V D.C

2: Mounted on FR-4 PCB copper, minimum recommended pad layout

Rating and characteristic curves (AS320-AL THRU AS3200-AL)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

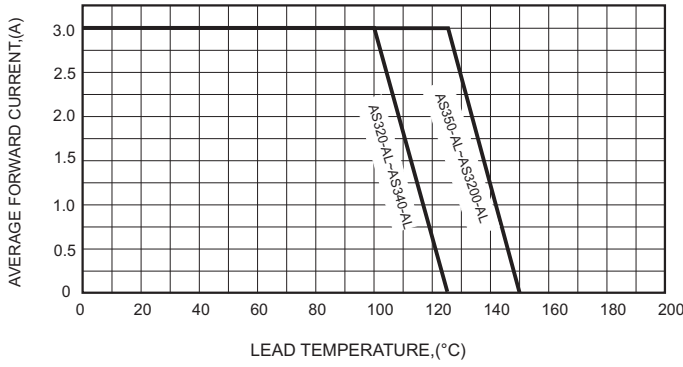


FIG.2-TYPICAL FORWARD CHARACTERISTICS

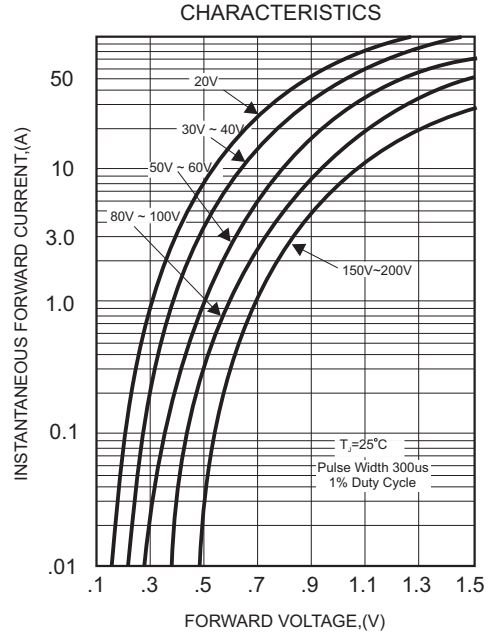


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

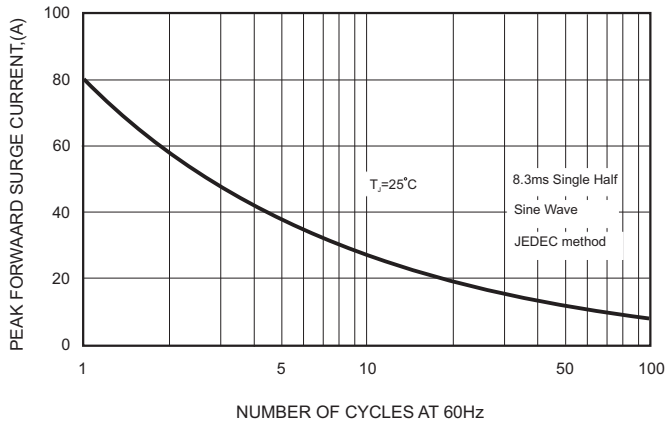


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

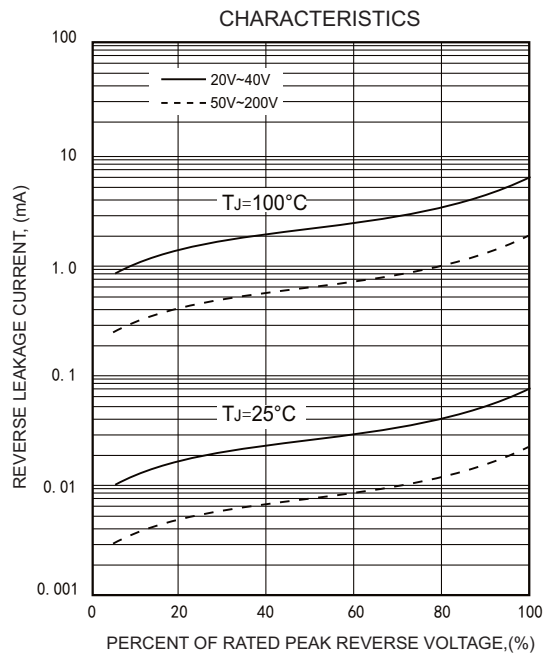
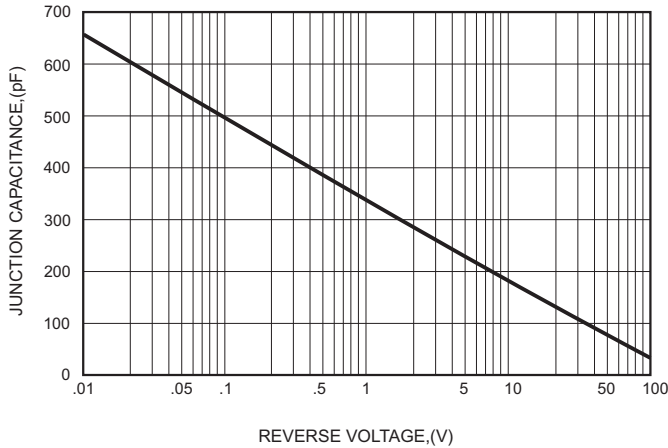




FIG.4-TYPICAL JUNCTION CAPACITANCE



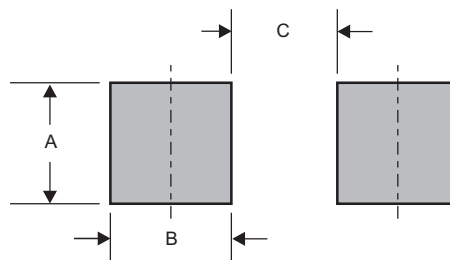
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
AS320-AL	SK32
AS330-AL	SK33
AS340-AL	SK34
AS350-AL	SS35
AS360-AL	SS36
AS380-AL	SS38
AS3100-AL	S310
AS3150-AL	S315
AS3200-AL	S320

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMA-L	0.110 (2.80)	0.059 (1.50)	0.110 (2.80)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [AnBon](#) manufacturer:

Other Similar products are found below :

[CUS06\(TE85L,Q,M\)](#) [MA4E2039](#) [D1FH3-5063](#) [MBR0530L-TP](#) [MBR10100CT-BP](#) [MBR30H100MFST1G](#) [MMBD301M3T5G](#) [PMAD1103-LF](#) [PMAD1108-LF](#) [RB160M-50TR](#) [RB520S-30](#) [RB551V-30](#) [DD350N18K](#) [DZ435N40K](#) [DZ600N16K](#) [BAS16E6433HTMA1](#) [BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [IDL02G65C5XUMA1](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#) [SBAT54CWT1G](#) [SBM30-03-TR-E](#) [SBS818-TL-E](#) [SK32A-LTP](#) [SK33A-TP](#) [SK34A-TP](#) [SK34B-TP](#) [SMD1200PL-TP](#) [ACDBN160-HF](#) [SS3003CH-TL-E](#) [STPS30S45CW](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM\)](#) [MBR1240MFST1G](#) [MBRB30H30CT-1G](#) [BAS28E6433HTMA1](#) [BAS 70-02L E6327](#) [HSB123JTR-E](#) [JANTX1N5712-1](#) [VS-STPS40L45CW-N3](#) [DD350N12K](#) [SB007-03C-TB-E](#) [SB10015M-TL-E](#) [SB1003M3-TL-E](#) [SK110-LTP](#)