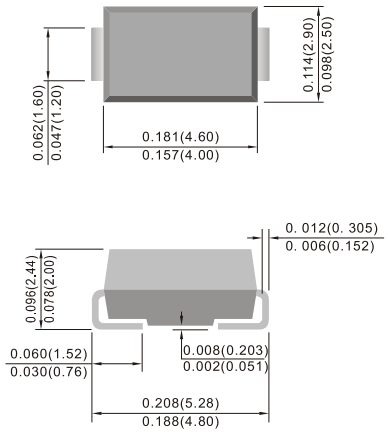
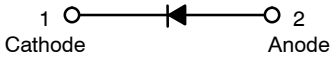
Features

- Glass passivated chip junction
- Ideal for automated placement
- Low forward voltage drop
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

DO-214AC (SMA)





MECHANICAL DATA

- Package: DO-214AC (SMA)
- Terminals: Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 2 whisker test
- Polarity: Indicated by cathode band

Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	1							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
Maximum instantaneous forward voltage@1A (Note 1)	V_F	1.1							V
Maximum reverse current @ rated V_R T_J=25°C T_J=125°C	I_R	1 50							μA
Typical reverse recovery time (Note 2)	t_{rr}	1.5							μs
Typical junction capacitance (Note 3)	C_J	12							pF
Non-repetitive peak reverse avalanche energy at 25°C, I_{AS}=1A, L=10mH	E_{RSM}	5							mJ
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	27 75					30 85		°C/W
Operating junction temperature range	T_J	- 55 to +175							°C
Storage temperature range	T_{STG}	- 55 to +175							°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

■ ATINGS AND CHARACTERISTICS CURVES (TA=25℃ unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

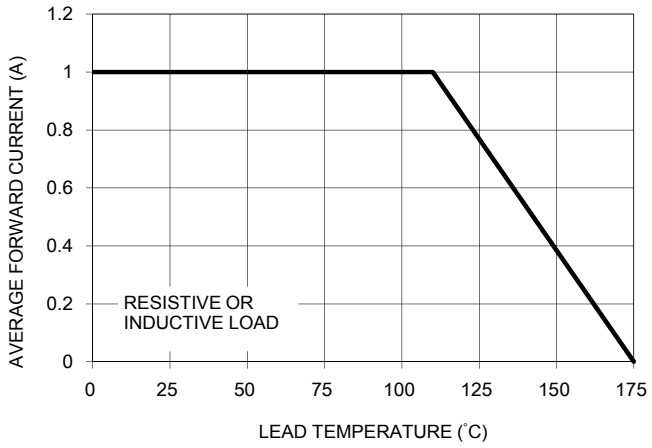


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

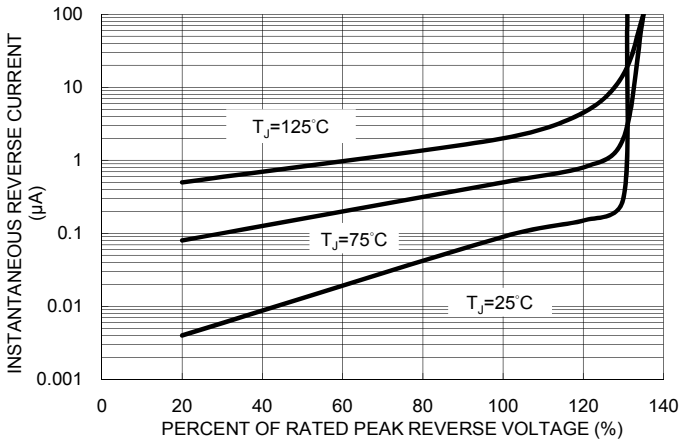


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

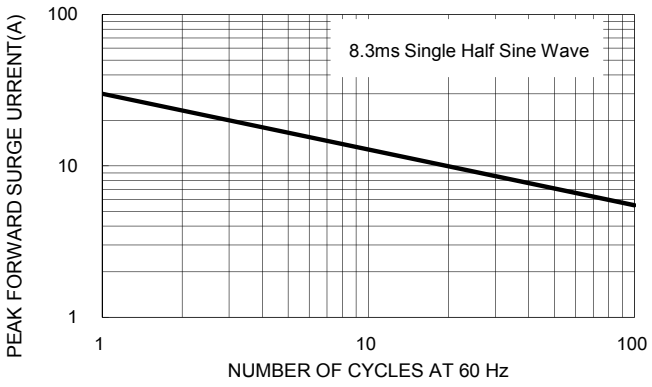


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

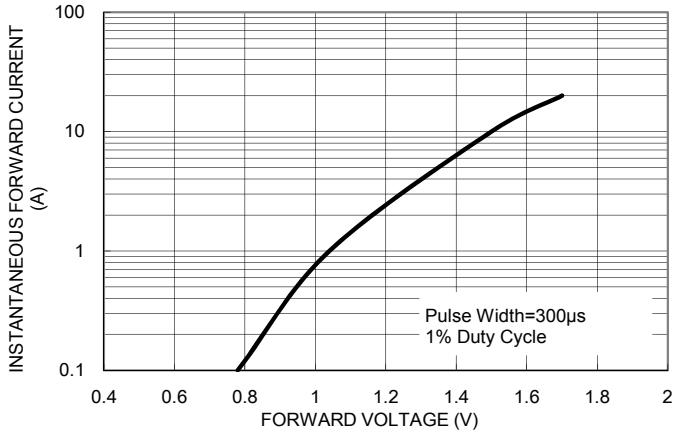


FIG. 5 TYPICAL JUNCTION CAPACITANCE

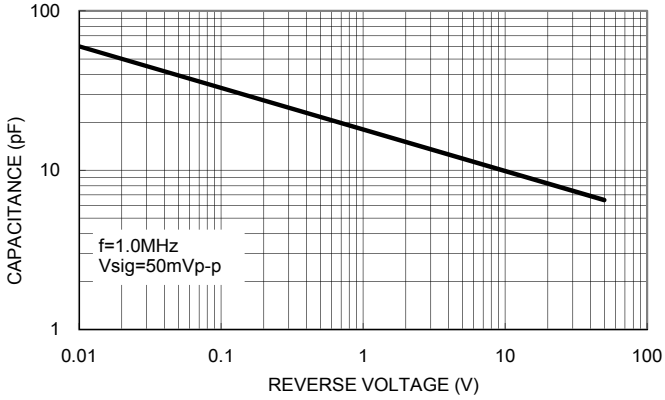
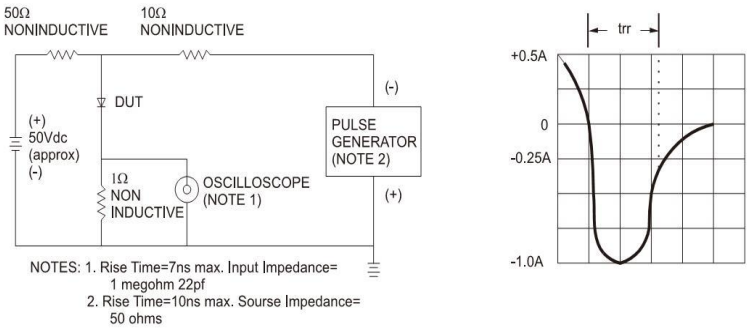


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=
1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance=
50 ohms

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Diodes - General Purpose, Power, Switching ***category:***

Click to view products by DOWO ***manufacturer:***

Other Similar products are found below :

MMBD3004S-13-F 1N3611 NTE156A NTE6244 1SS400CST2RA SDAA13 SHN2D02FUTW1T1G 1N4449 1N456A 1N914BTR D291S45T BAS 16-02L E6327 BAS 16-02V H6327 BAS 21U E6327 BAS 28 E6327 BAW56DWQ-7-F BAW75-TAP MM230L-CAA IDW40E65D1 JAN1N3600 JAN1N4454UR-1 SMMSD4148T3G BYW95B/A52A NSVDAN222T1G CDSZC01100-HF BAV70HDW-7 BAS28-7 JANTX1N6640 BAW56HDW-13 BAS28 TR VS-HFA04SD60STR-M3 1SS388-TP BAV99TQ-13-F BAV99HDW-13 1N4004 MMDB30-E28X LS4148 IDV15E65D2 W0503RH200S0L W0503SH200S0L M0268SJ200NLF M0268RJ200NLF S3MBF US1J DAN217U-TP SHV-06JNS-Q IDW30C65D1 IDW80C65D1 VS-HFA30TA60CSR-M3 M1MA152WAT1