

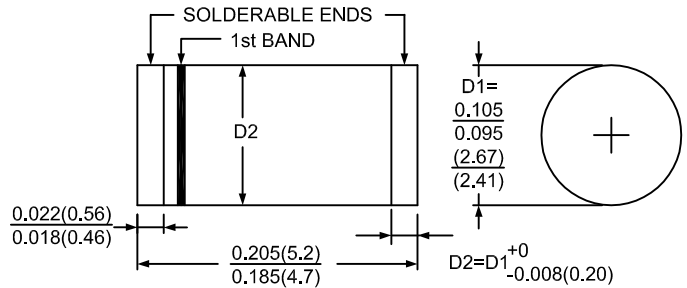
# SM1200 THRU SM2000

## SURFACE MOUNT GLASS PASSIVATED RECTIFIER

### FEATURES

- Glass Passivated chip
- Low Forward Voltage Drop
- Low Leakage
- High Current Capability
- High Surge Current Capability
- Idle for surface mount applications
- Built-in strain relief

### MELF / DO-213AB



1st band denotes type positive and (cathode)

Dimensions in inches and (millimeters)

### MECHANICAL DATA

- Case: Molded plastic use UL 94V-0 recognized flame retardant epoxy
- Terminals : Plated terminals, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Silver color band on body denotes cathode
- Mounting Position : Any
- Weight : 0.116 grams, 0.0046 ounce
- Lead Free: For RoHS/Lead Free Version, Green molding compound as per IEC61249 Std

### Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Parameter Symbol	Symbol	SM1200	SM1400	SM1800	SM1600	SM2000	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	1200	1400	1800	1600	2000	V
Maximum RMS voltage	$V_{RMS}$	840	980	1120	1260	1400	V
Maximum DC blocking voltage	$V_{DC}$	1200	1400	1800	1600	2000	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0					A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	$I_{Fsm}$	30					A
Maximum instantaneous forward voltage at 1A	$V_F$	1.15					V
Maximum leakage current $T_J = 25^{\circ}\text{C}$ Maximum leakage current $T_J = 100^{\circ}\text{C}$	$I_R$	5 50					uA
Typical Junction Capacitance (Note1)	$C_J$	25	18				pF
Typical thermal resistance (Note2)	$R_{thA}$	$\leq 50$					$^{\circ}\text{C}/\text{W}$
Operating temperature range	$T_J$	-55 to +175					$^{\circ}\text{C}$
Storage temperature range	$T_{STG}$	-55 to +175					$^{\circ}\text{C}$

**Note:** (1). Measured at 1.0MHz and applied reverse voltage of 4.0VDC  
 (2). Thermal resistance from junction to ambient at , **P.C.B.** mounted.

Fig. 1 Rated forward current vs. ambient temperature

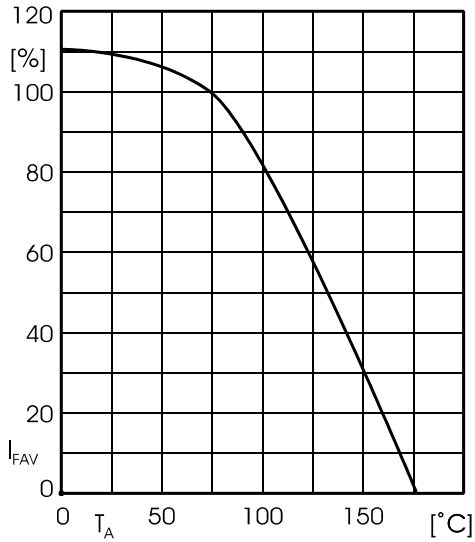


Fig. 2 Forward characteristics ( typical values )

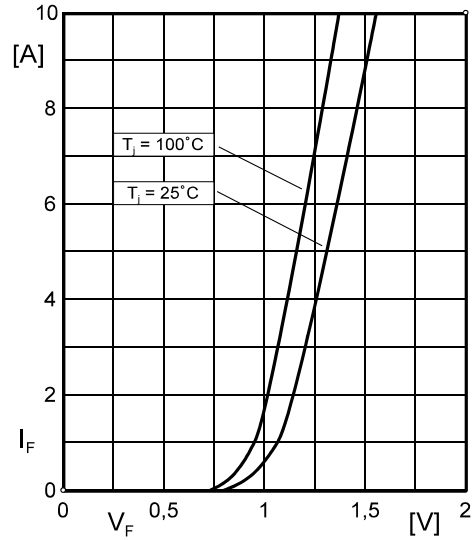


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

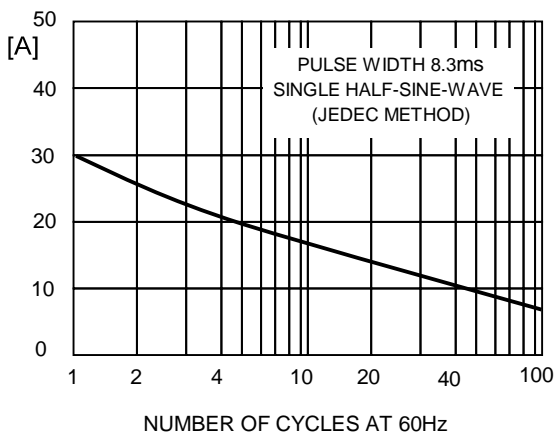
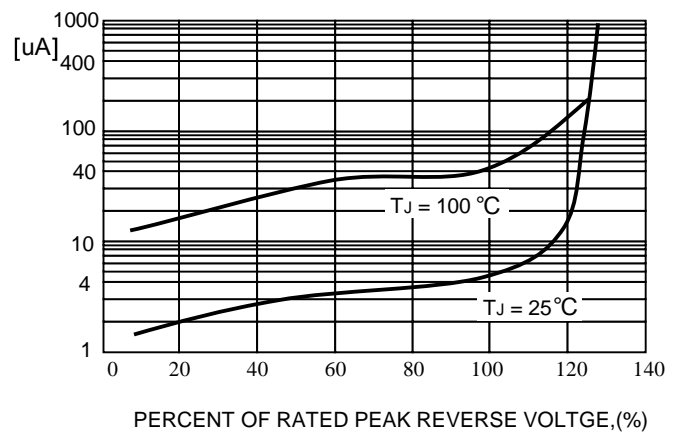


FIG.4-TYPICAL REVERSE CHARACTERISTICS



## 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* [DACO SEMICONDUCTOR manufacturer:](#)

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [RGP30G-E373](#) [BAQ333-TR](#) [BAQ335-TR](#) [BAQ33-GS18](#) [BAS1602VH6327XT](#) [BAV17-TR](#) [BAV19-TR](#) [BAV301-TR](#) [BAW27-TAP](#) [NSVBAV23CLT1G](#) [NTE525](#) [1SS181-TP](#) [1SS184-TP](#) [1SS193,LF](#) [1SS193-TP](#) [1SS400CST2RA](#) [SBAV99LT3G](#) [SDAA13](#) [LL4448-GS18](#) [SHN2D02FUTW1T1G](#) [LS4150GS18](#) [LS4151GS08](#) [SMMBD7000LT3G](#) [1N4449](#) [1N4934-E3/73](#) [APT100DL60HJ](#) [RFUH20TB3S](#) [RGP30G-E354](#) [RGP30M-E3/73](#) [D291S45T](#) [MCL4151-TR](#) [BAS 16-02L E6327](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAS33-TAP](#) [BAS 70-02V H6327](#) [BAV300-TR](#) [BAV303-TR3](#) [BAW27-TR](#) [BAW56DWQ-7-F](#) [BAW56M3T5G](#) [BAW75-TAP](#) [BAW76-TR](#) [MM230L-CAA](#) [MMSD914-TP](#) [IDW40E65D1](#)