DACO SEMICONDUCTOR CO., LTD.

SM1200 THRU SM2000

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

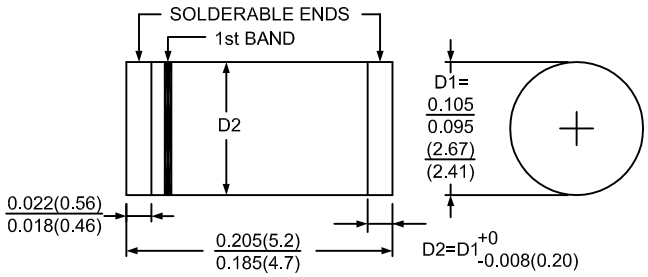
FEATURES

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

MECHANICAL DATA

- Case:Molded plastlc use UL 94V-0 recognlzed flame retardant epoxy
- Terminals : Plated terminals,solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Sliver 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

MELF / DO-213AB



1st band denotes type positive and (cathode)

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Charateristics @T_A=25℃ 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℃ Maximum leakage current T_J =100℃	I_R	5 50					uA
Typical Junction Capacitance (Note1)	C_J	25		18			pF
Typical thermal resistance (Note2)	R_{thA}	≤50					℃/W
Operating temperature range	T_J	-55 to +175					℃
Storage temperature range	T_{STG}	-55 to +175					℃

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.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Rated forward current vs. ambient temperature

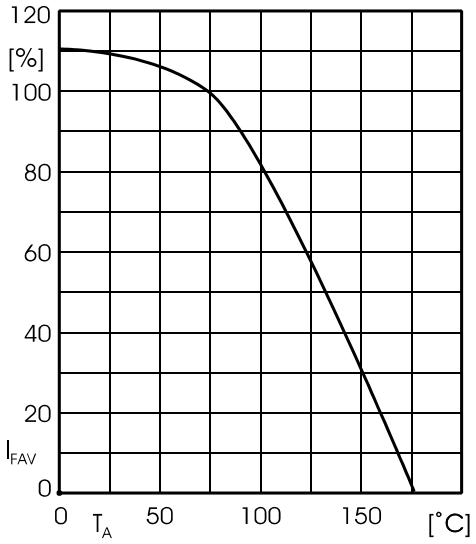


Fig. 2 Forward characteristics (typical values)

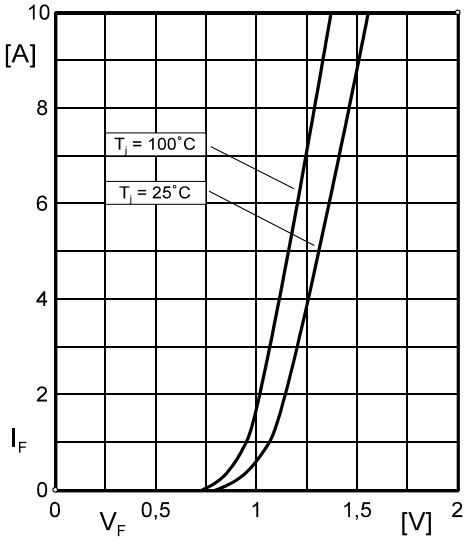
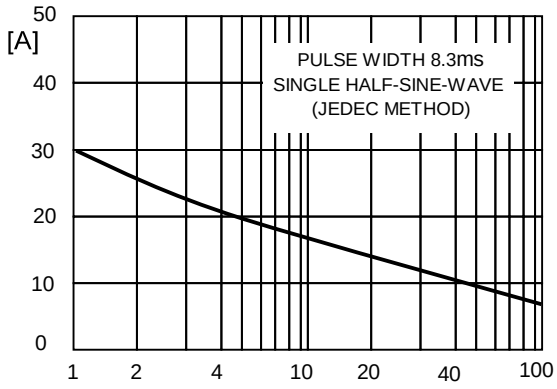
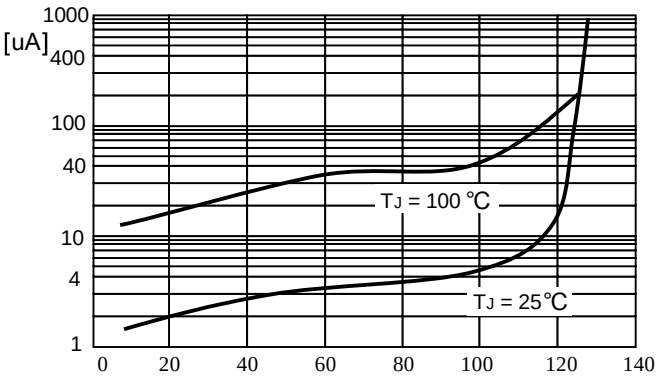


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTGE,(%)

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