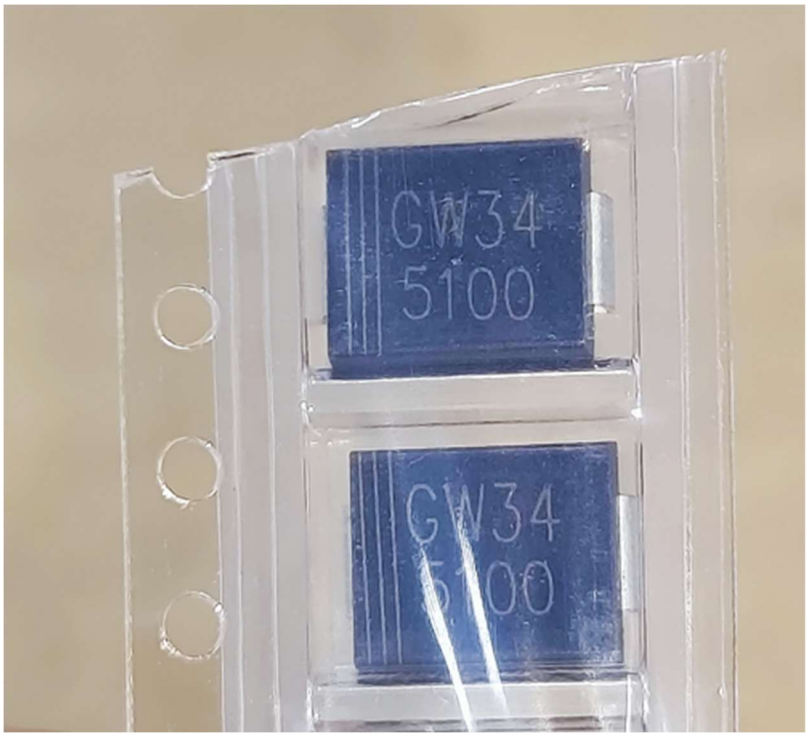


設計驗證
工程課
2025 -05- 29
發行
鈺創科技開發股份有限公司

FLYiNG 承　認　書

客戶名稱:　鈺緯科技開發股份有限公司

客戶料號:　3DSM5100C2Y (D0176)

品名規格:　5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

承認廠牌:　GW

原廠料號：　SM5100C DO-214AB(SMC)

日　　期:　2025 年 05 月 27 日

設計驗證 工程課 2025 -05- 29 發行 鈺緯科技開發股份有限公司

發行單位	承認單位		
	主　管	核　對	經　辦
	鄭明倫	填上負責業務名	填上負責助理名
如有任何變更，須於事前聯絡取得承認後，始能變更。			

汎翊國際有限公司

TEL:(02) 2995-7676　　FAX:(02) 2995-7616

24158 新北市三重區光復路一段 80 號 5 樓

SM520C THRU SM5100C

5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



FEATURES

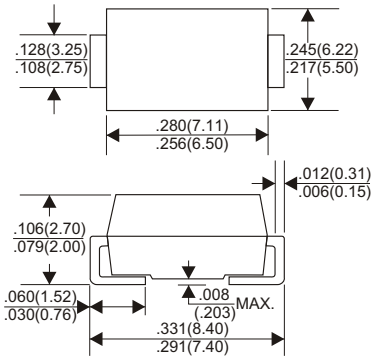
* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Low forward voltage drop

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Metallurgically bonded construction
* Polarity: Color band denotes cathode end
* Mounting position: Any

VOLTAGE RANGE
20 to 100 Volts
CURRENT
5.0 Amperes

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM520C	SM530C	SM540C	SM550C	SM560C	SM580C	SM5100C	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at T_A=85°C	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 5.0A	0.55			0.75		0.85		V
Maximum DC Reverse Current Ta=25°C	0.5							mA
at Rated DC Blocking Voltage Ta=100°C	20							mA
Typical Junction Capacitance (Note1)	400							pF
Typical Thermal Resistance RθJL (Note 2)	15							°C/W
Operating Temperature Range T_J	-55 — +125					-55 — +150		°C
Storage Temperature Range T_{STG}	-55 — +150							°C

NOTES:

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

2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (SM520C THRU SM5100C)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

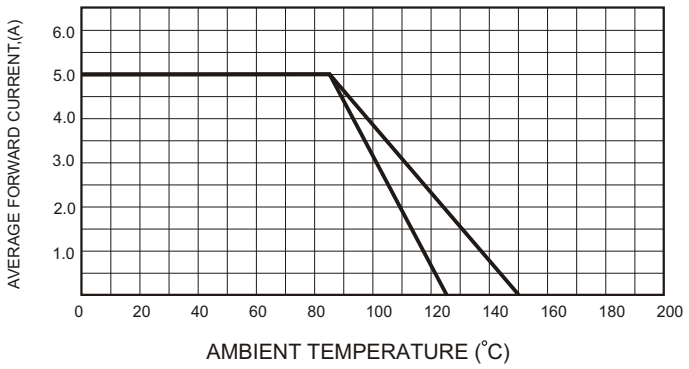


FIG.2-TYPICAL FORWARD CHARACTERISTICS

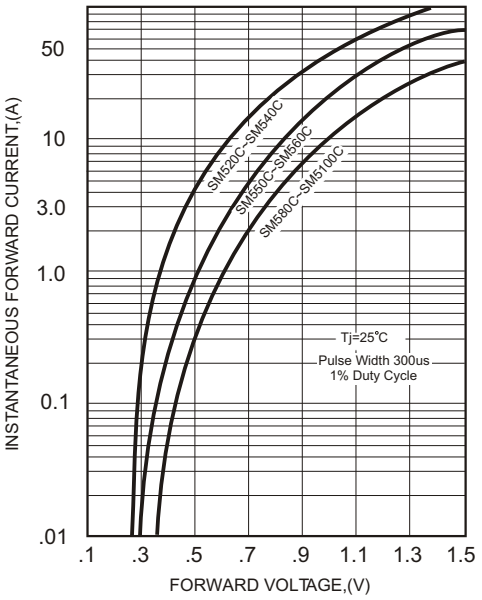


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

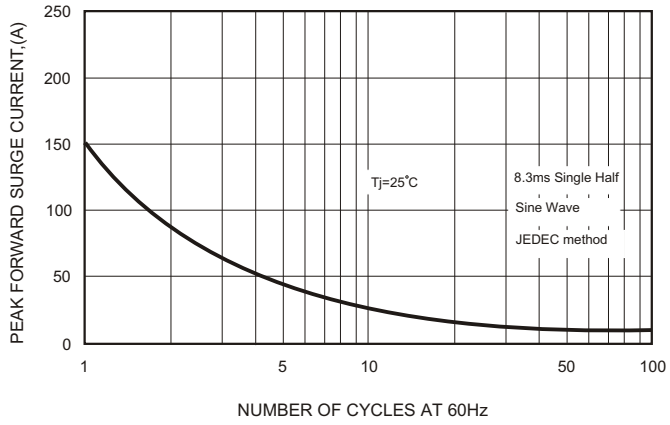


FIG.4-TYPICAL JUNCTION CAPACITANCE

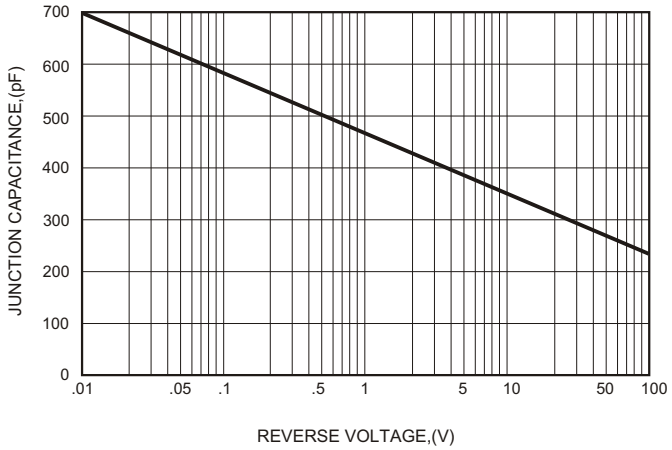


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

