



SK102C THRU SK1010C

Reverse Voltage - 20 to 100 Volts Forward Current - 10.0 Ampere

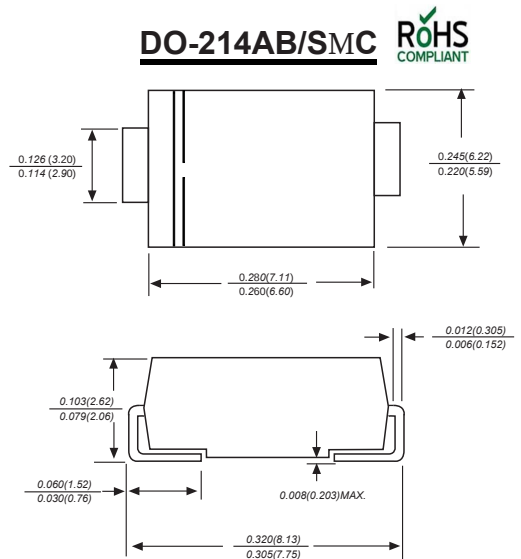
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250 °C/10 seconds at terminals

Mechanical Data

Case : JEDEC DO-214AB/SMC molded plastic body
Terminals : Solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end Mounting
Position : Any
Weight : 0.007 ounce, 0.25 grams



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD SK102C	MDD SK103C	MDD SK1035C	MDD SK104C	MDD SK1045C	MDD SK106C	MDD SK108C	MDD SK1010C	UNITS
Marking Code										
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	35	40	45	60	80	100	V
Maximum RMS voltage	V _{RMS}	14	21	24.5	28	31.5	42	56	70	V
Maximum DC blocking voltage	V _{DC}	20	30	35	40	45	60	80	100	V
Maximum average forward rectified current at TL(see fig.1)	I _(AV)	10.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I _{FSM}	250								A
Maximum instantaneous forward voltage at 10.0A	V _F	0.65						0.85		V
Maximum DC reverse current T _A =25℃ at rated DCblocking voltage T _A =125℃	I _R	1.0								mA
		20								
Typical junction capacitance (NOTE 1)	C _J	500								pF
Typical thermal resistance (NOTE 2)	R _{0JA}	18.0								℃/W
Operating junction temperature range	T _J	-50 to +150								℃
Storage temperature range	T _{STG}	-50 to +150								℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

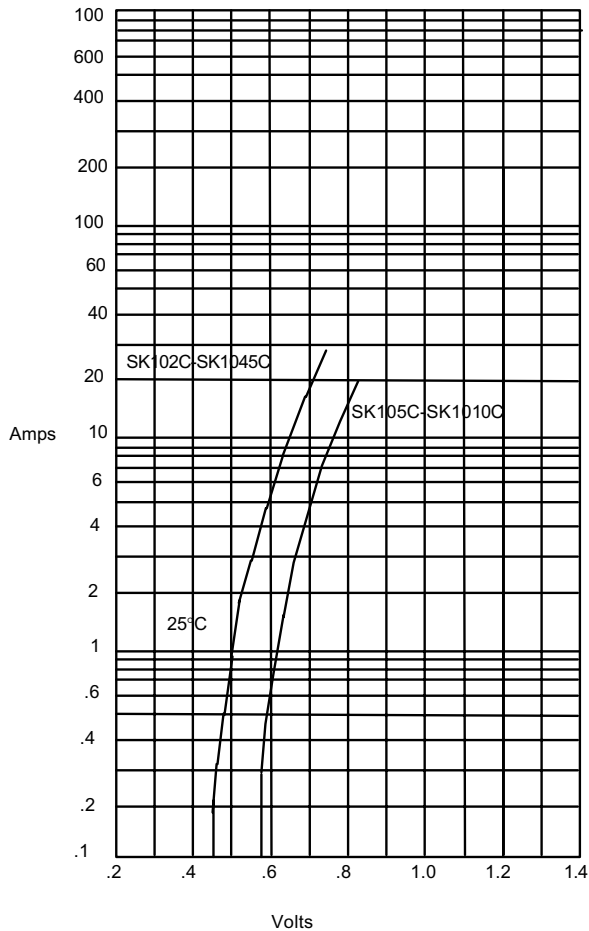


SK102C THRU SK1010C

Reverse Voltage - 20 to 100 Volts Forward Current - 10.0 Ampere

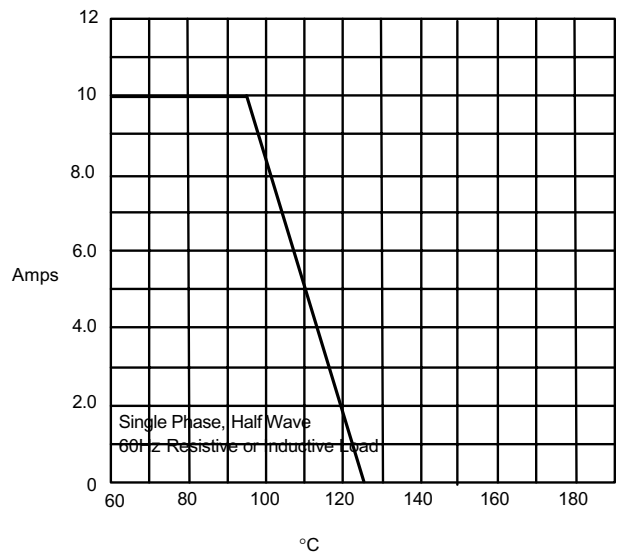
Typical Characteristics

Figure 1
Typical Forward Characteristics



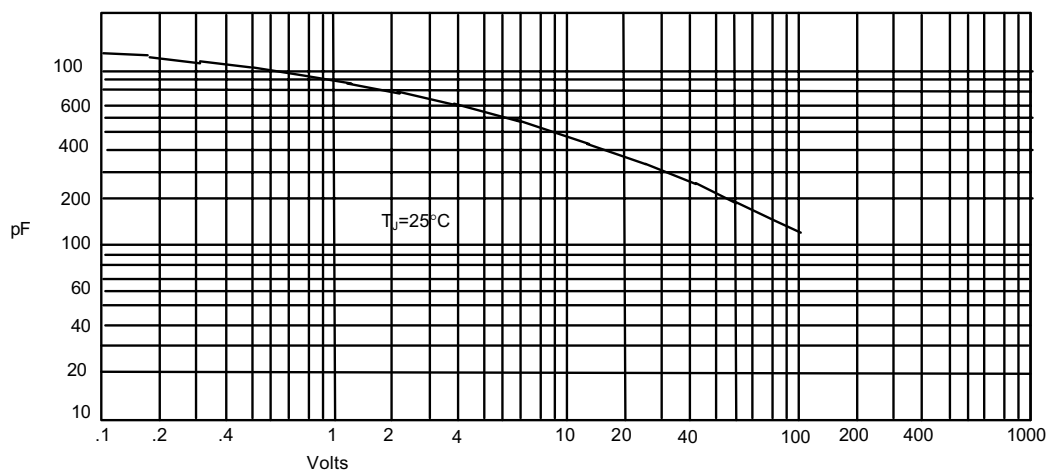
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Lead Temperature - C

Figure 3
Junction Capacitance



Junction Capacitance - pF versus

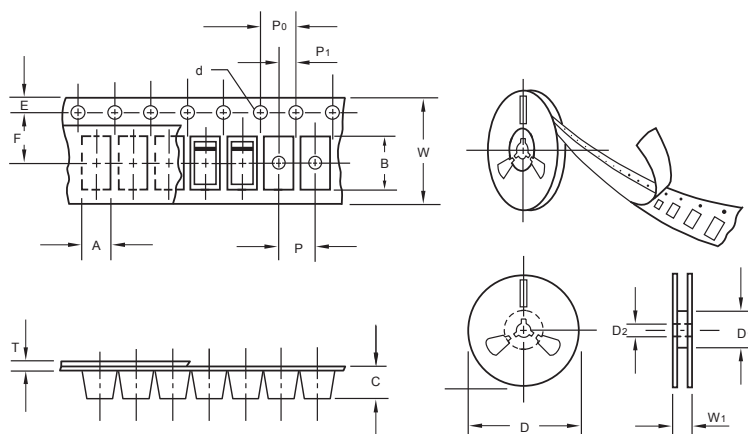
The curve above is for reference only.



SK102C THRU SK1010C

Reverse Voltage - 20 to 100 Volts Forward Current - 10.0 Ampere

Packing information



unit:mm

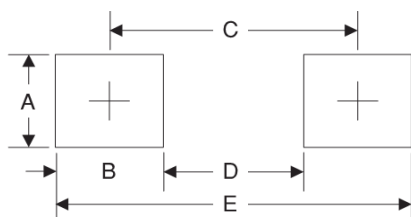
Item	Symbol	Tolerance	SMC
Carrier width	A	0.1	6.15
Carrier length	B	0.1	8.41
Carrier depth	C	0.1	2.42
Sprocket hole	d	0.05	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D1	min	50.00
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
Punch hole pitch	P	0.1	8.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	16.00
Reel width	W1	1.0	16.50

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (mm)	BOX (pcs)	INNER BOX (mm)	REEL DIA, (mm)	CARTON SIZE (mm)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMC	13"	3,000	4.0	6000	190*190*41	330	365*365*340	42000	14.0

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	4.3	0.170
B	4.1	0.160
C	7.9	0.311
D	3.8	0.150
E	12	0.472

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 [Microdiode Electronics](#) manufacturer:

Other Similar products are found below :

[MA4E2508M-1112](#) [MBR0530L-TP](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [BAS16E6433HTMA1](#) [BAS3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [IDL02G65C5XUMA1](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SBS818-TL-E](#) [SK310-T](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [JANTX1N5712-1](#) [SB007-03C-TB-E](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#) [NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [NRVB130LSFT1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#) [B0530WSQ-7-F](#) [PDS1040Q-13](#) [B160BQ-13-F](#) [B140S1F-7](#)