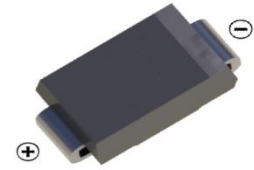
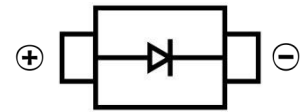


SCHOTTKY BARRIER DIODE
FEATURES

- Small Surface Mount device
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications


SMA
MECHANICAL DATA

- Case: SMA(DO-214AC)
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.065 grams (approximate)


MAXIMUM RATINGS AND CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	SS52A	SS53A	SS54A	SS55A	SS56A	SS58A	SS510A	SS515A	SS520A	Unit	
Repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V	
RMS Reverse Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V	
DC Reverse Voltage	V _R	20	30	40	50	60	80	100	150	200	V	
Mean rectifying current	I _F	5.0									A	
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I _{FSM}	100									A	
Thermal Resistance From Junction To Ambient(1)	R _{θJA}	60									°C/W	
	R _{θJL}	22										
Junction Temperature	T _J	-55 ~+125									°C	
Storage Temperature	T _{STG}	-55 ~+125				-55 ~+150						°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	SS52A	SS53A	SS54A	SS55A	SS56A	SS58A	SS510A	SS515A	SS520A	Unit	Conditions	
Forward voltage	V _F	0.60		0.70		0.85		0.90			V	I _F =5A	
Reverse current	I _R	0.5				0.1						mA	V=V _R , T _a =25°C
		10				5						mA	V=V _R , T _a =100°C
Junction capacitance	C _J	265		210		150		100			pF	V _R =4V, f=1MHZ	

NOTE:

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Typical Characteristics

FIG.1: I_o - T_L Curve

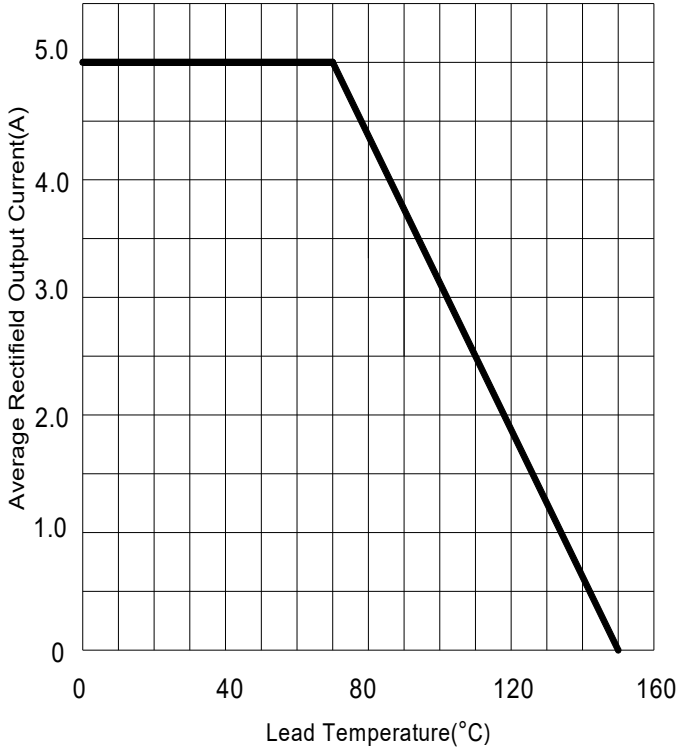


FIG.2: Surge Forward Current Capability

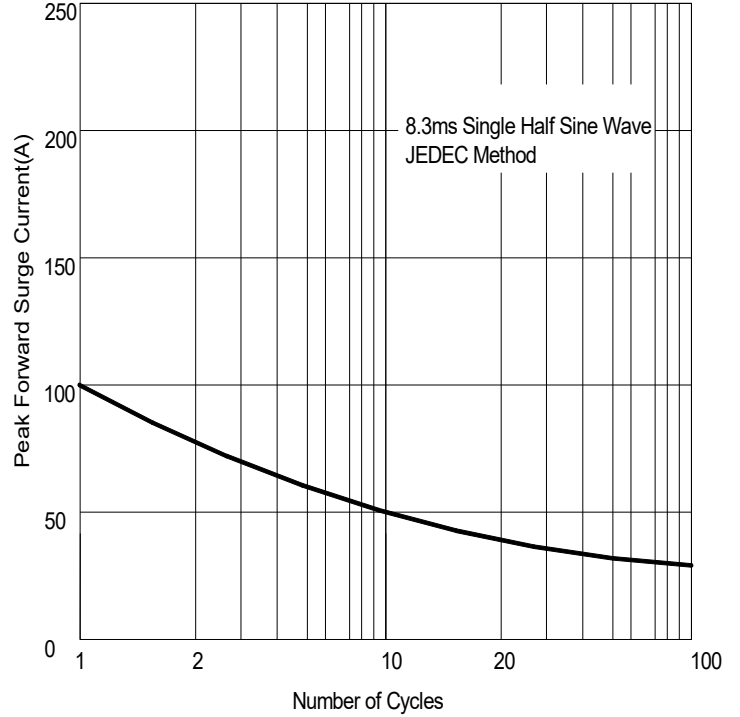


FIG.3: Typical Forward Characteristics

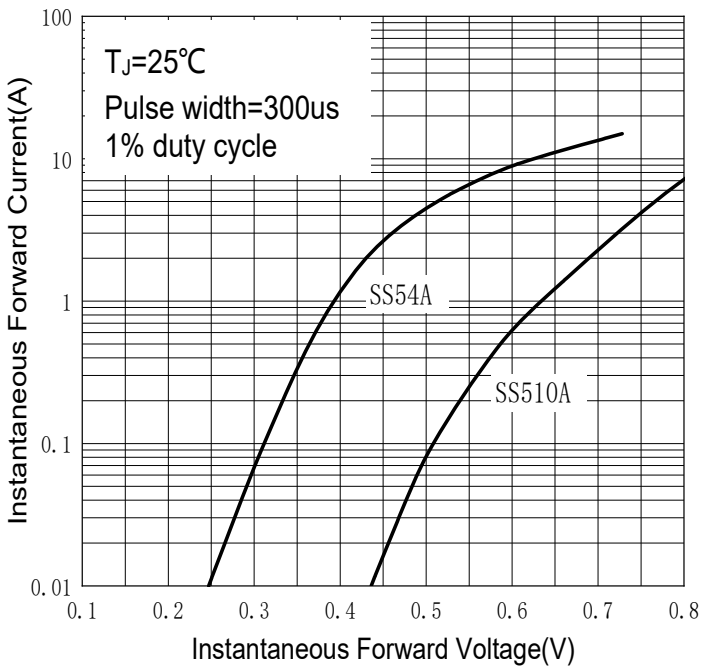
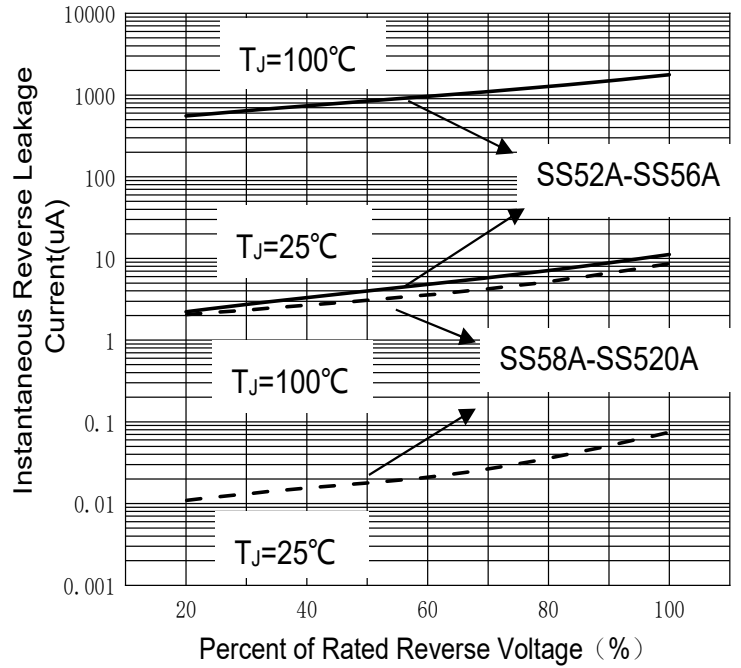
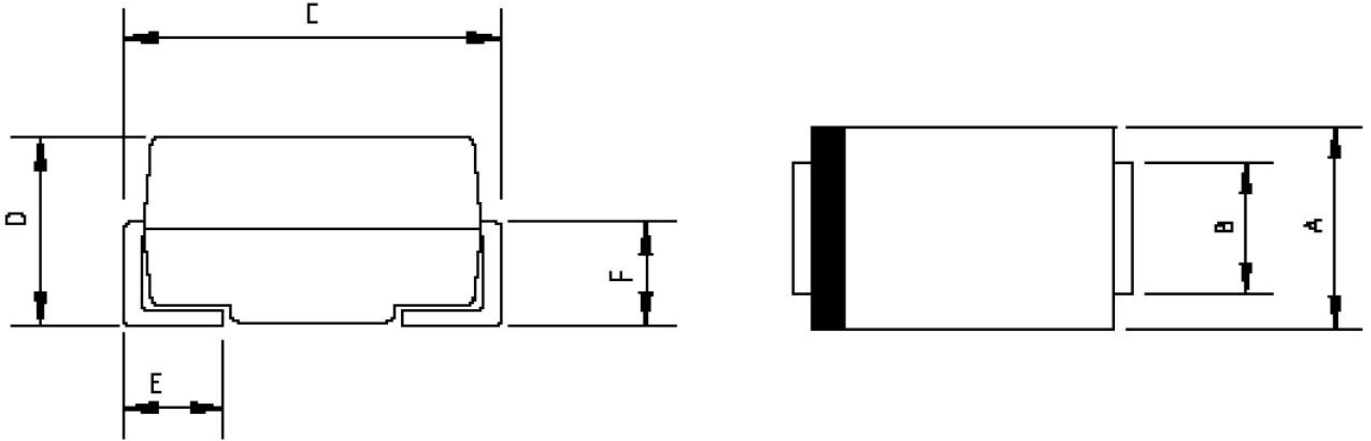


FIG.4: Typical Reverse Characteristics



SCHOTTKY BARRIER DIODE

SMA Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.20	2.80	0.086	0.110
B	1.30	1.70	0.051	0.067
C	4.70	5.30	0.185	0.209
D	1.70	2.55	0.067	0.100
E	0.90	1.50	0.035	0.059
F	0.90	1.50	0.035	0.059

SMA Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

SCHOTTKY BARRIER DIODE

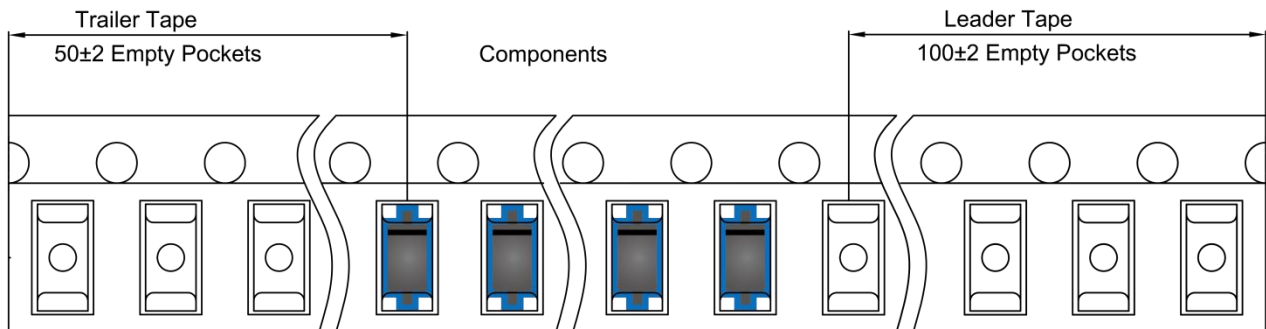
SMA Tape and Reel

SMA Embossed Carrier Tape

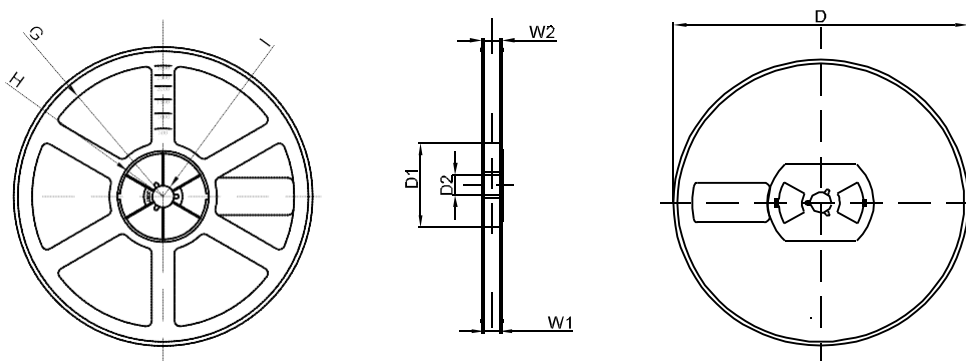


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SMA	2.89	5.35	2.68	Ø1.50	1.75	5.50	4.00	4.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SMA Tape Leader and Trailer



SMA Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	12.40	17.60
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1

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