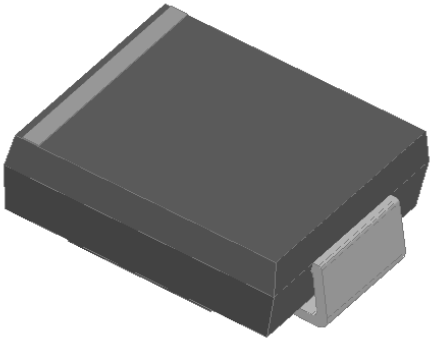
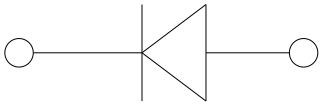
Surface Mount Schottky Rectifier





Features

- Guardring for overvoltage protection
- Low forward voltage drop,Low power losses
- High forward surge capability
- High frequency operation
- Solder dip 260 °C max. 10 s, per JESD 22-B106

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

Mechanical Data

- **Package**: DO-214AB (SMC)
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end

■Maximum Ratings (T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	SSL54	SSL56	SSL510
Device marking code			**SSL54**	**SSL56**	**SSL510**
Repetitive Peak Reverse Voltage	V_{RRM}	V	40	60	100
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	I_O	A	5.0		
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave,1 cycle, Ta=25℃	I_{FSM}	A	100	160	100
Storage Temperature	T_{stg}	℃	-55 ~+125	-55 ~+150	
Junction Temperature	T_j	℃	-55 ~+125	-55 ~+150	

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SSL54	SSL56	SSL510
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=5.0A	0.45	0.5	0.7
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	mA	T_a=25℃	0.5		0.1
			T_a=100℃	10		5

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	SSL54	SSL56	SSL510
Thermal Resistance	Junction to ambient	$R_{\theta J\text{-}A}$	℃/W	50(1)		
	Junction to lead	$R_{\theta J\text{-}L}$	℃/W	15(1)		

Note(1)
Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SSL54~SSL510	F1	Approximate 0.252	3000	/	42000	13” reel

■ Characteristics(Typical)

FIG.1: Io-TL Curve

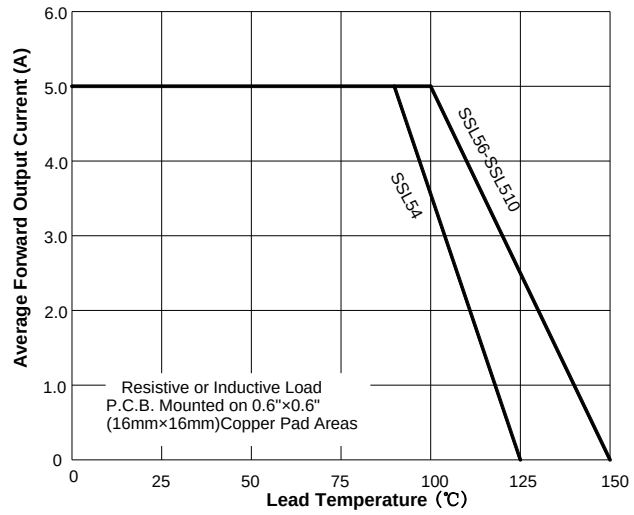


FIG.2: Forward Surge Currrent Capability

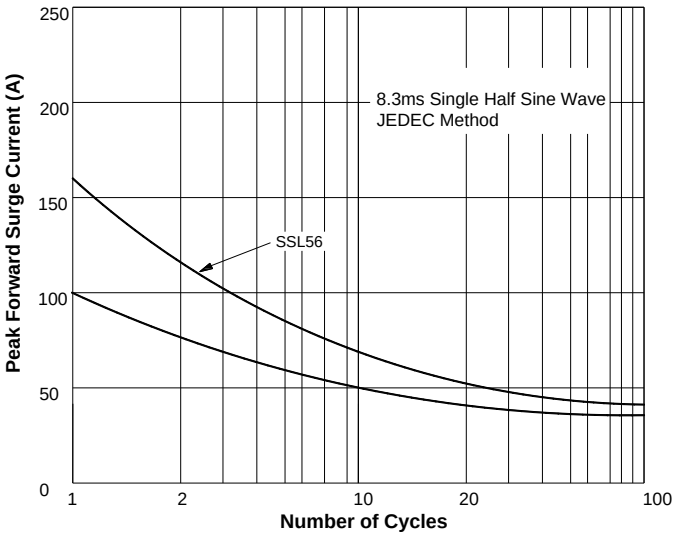


FIG.3: Forward Voltage

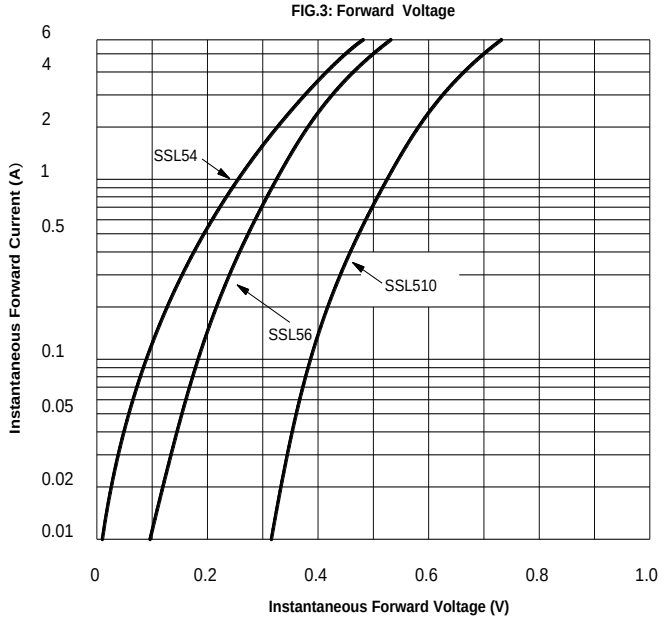
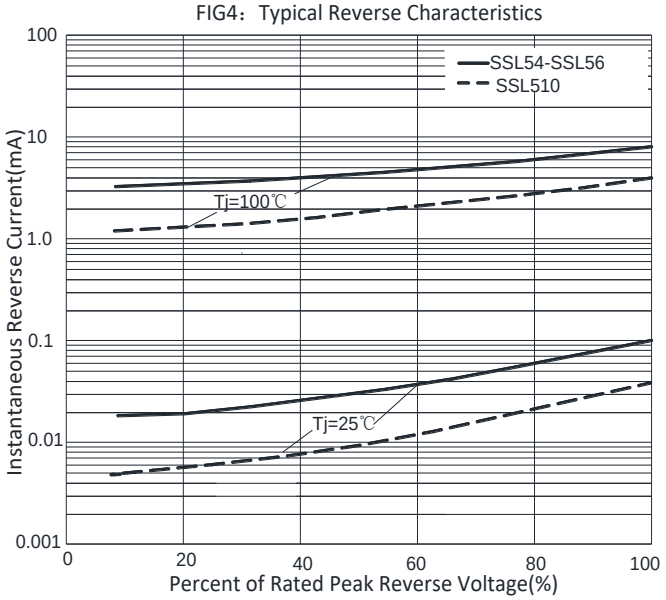
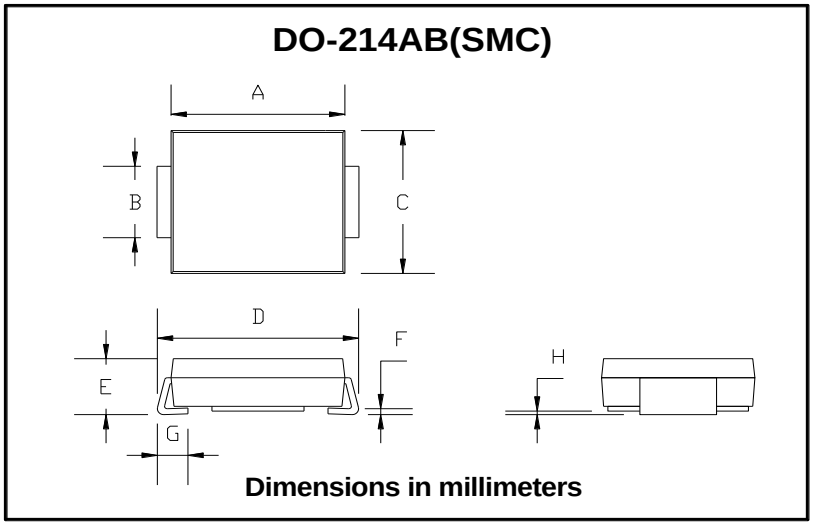


FIG4：Typical Reverse Characteristics

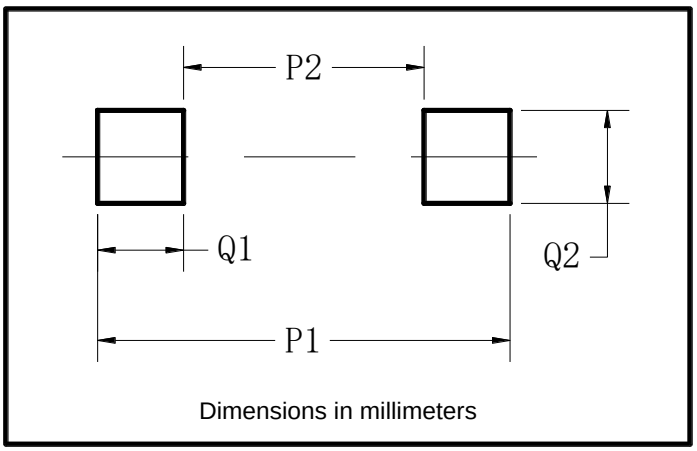


■ Outline Dimensions



DO-214AB (SMC)		
Dim	Min	Max
A	6.60	7.11
B	2.85	3.27
C	5.59	6.22
D	7.75	8.13
E	1.99	2.61
F	0.15	0.31
G	0.76	1.52
H	0.05	0.20

■ Suggested pad layout



Dim	Typ
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82

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