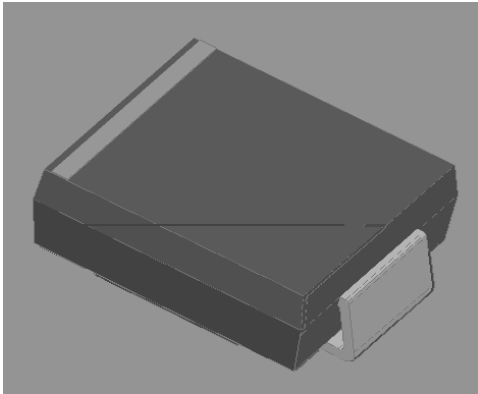


Surface Mount Schottky Rectifier

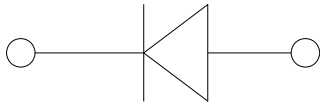


Features

- Guardring for overvoltage protection
- Low power loss
- Extremely fast switching
- High forward surge capability
- High frequency operation
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Part no. with suffix "Q" means AEC-Q101 qualified

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, automotive 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

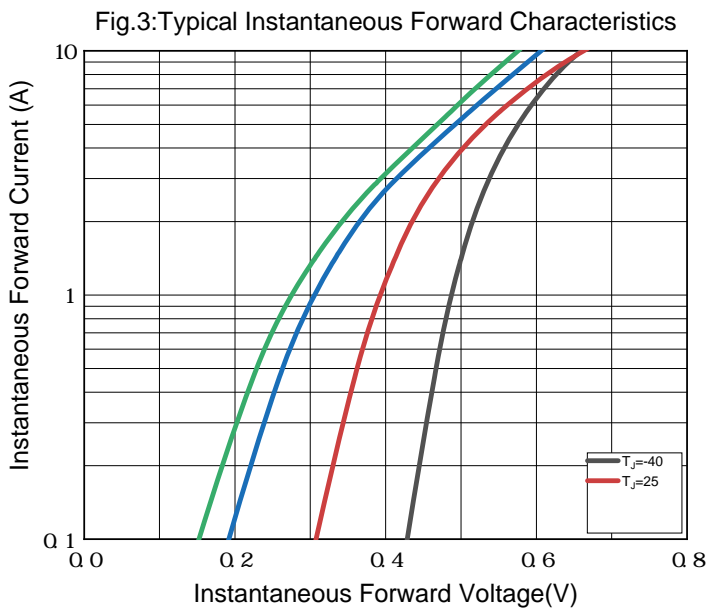
Polarity: Color band denotes the cathode end

Maximum Ratings (Ta=25 Unless otherwise specified)

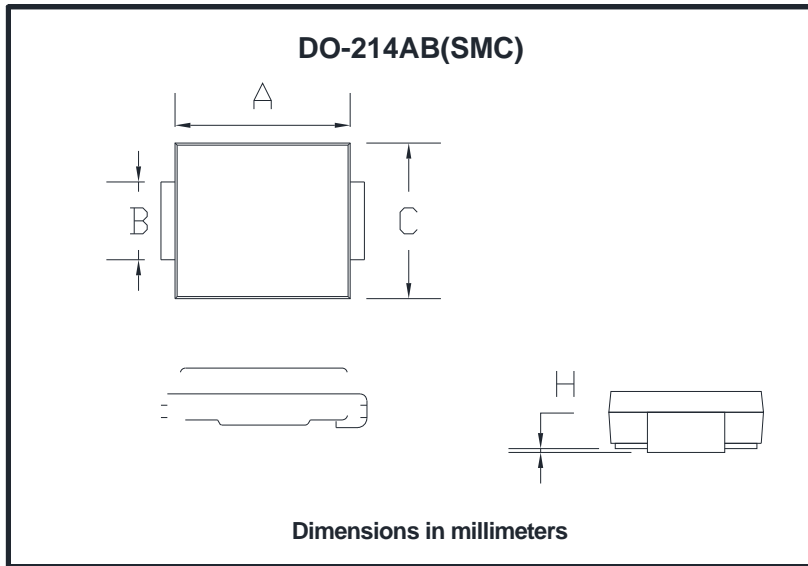
PARAMETER	SYMBOL	UNIT	SS86Q
Device marking code			SS86
Repetitive peak reverse voltage	V_{RRM}	V	60
Maximum RMS voltage	V_{RMS}	V	42
Maximum DC blocking voltage	V_{DC}	V	60
Maximum average forward rectified current at T_L (Fig.1)	I_O	A	8.0
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, $T_J=25$	I_{FSM}	A	150
Voltage rate of change (rated V_R)	dV/dt	V/ μ s	10000
Storage temperature	T_{stg}		-55 ~+150
Junction temperature	T_J		-55 ~+150

Electrical Characteristics (Ta=25 Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	TYP	MAX	UNIT	
Instantaneous forward voltage	V_F	$I_F=8A$	$T_J=25$	0.6	0.70	V
			$T_J=125$	-	0.6	
Reverse current	I_R	Rated V_R	$T_J=25$	13	100	μ A
			$T_J=100$	-	20	mA
Typical junction capacitance	C_J	$V_R=4V, f=1MHz$	330	-	pF	

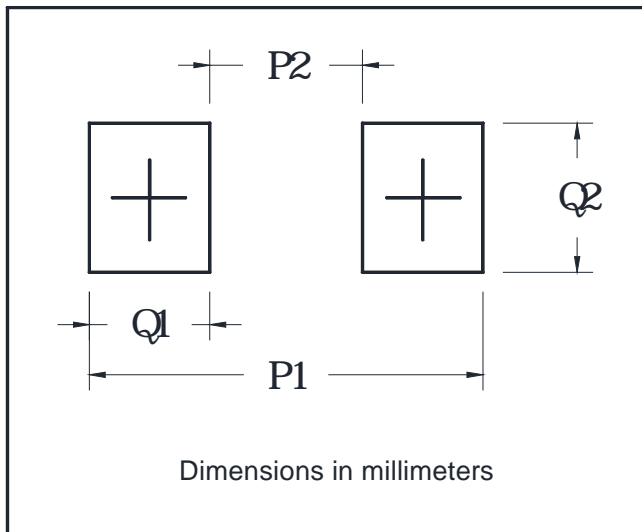


Outline Dimensions



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



DO-214AB (SMC)	
Dim	Min
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82

