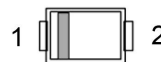
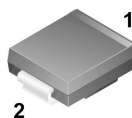


Features:

- ☐ Metal silicon junction, majority carrier conduction
- ☐ For surface mounted applications
- ☐ Low power loss, high efficiency
- ☐ Fast switching for high efficiency
- ☐ High forward surge current capability
- ☐ For use in low voltage, high frequency inverters

DO-214AB
(SMC)



1.Cathode 2. Anode

Absolute Maximum Ratings* (TA=25°C Unless otherwise noted)

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	CH1045C	CH1060C	CH10100C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	60	100	V
Maximum RMS voltage	V_{RMS}	32	42	70	V
Maximum DC Blocking Voltage	V_{DC}	45	60	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10.0			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150			A
Max Instantaneous Forward Voltage @10.0 A	V_F	0.55	0.75	0.90	V
Maximum DC Reverse Current $T_J = 25^{\circ}C$ at Rated DC Reverse Voltage $T_J = 100^{\circ}C$	I_R	0.5 50			mA
Typical Thermal Resistance	$R_{\theta JA}$	20			°C/W
Operating Junction Temperature Range	T_J	-55 ~ +150			°C
Storage Temperature Range	T_{stg}	-55 ~ +150			°C

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

Typical Characteristics

Fig.1 Forward Current Derating Curve

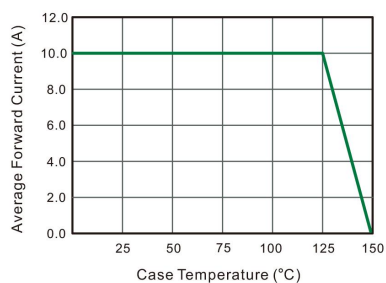


Fig.2 Typical Reverse Characteristics

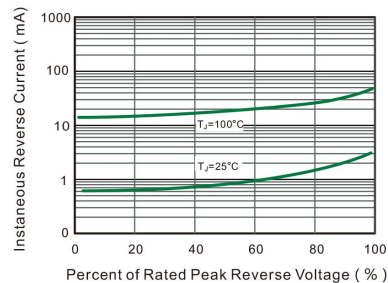


Fig.3 Typical Forward Characteristic

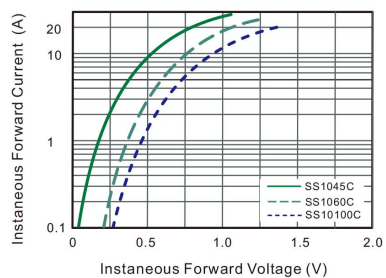


Fig.4- Typical Transient Thermal Impedance

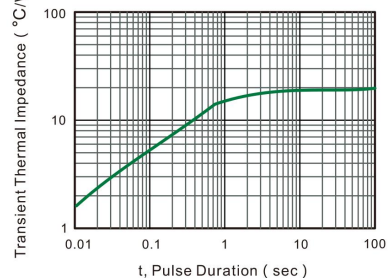
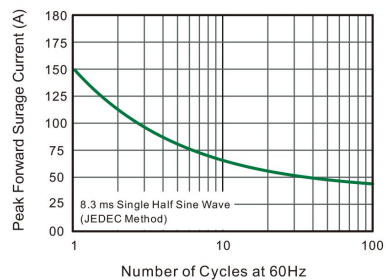
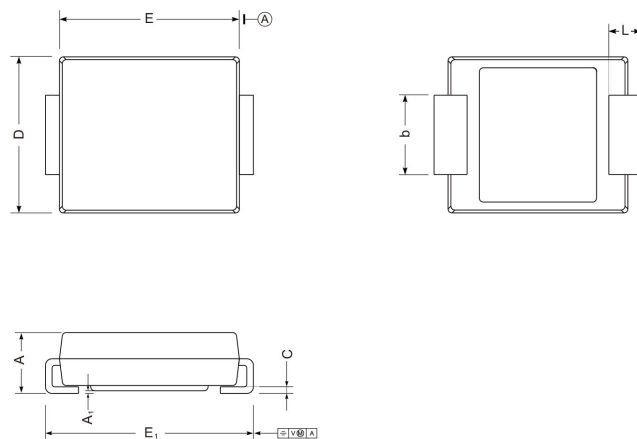


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Dimension

DO-214AB (SMC)



SMC mechanical data

UNIT		A	E	D	E ₁	A ₁	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108

The recommended mounting pad size

