



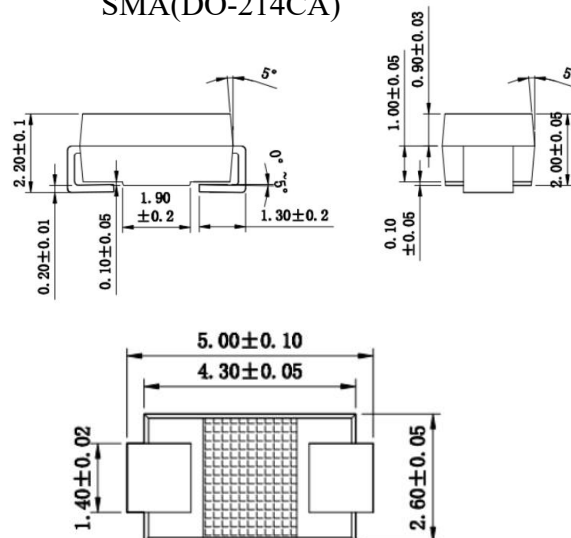
Super Fast recovery rectifiers

Major Ratings and Characteristics

FEATURES

- .Glass Passivated Chip Junction
- .For surface mounted applications
- .Low profile package
- .Superfast reverse recovery time
- .Lead free in comply with EU RoHS 2011/65/EU directives

SMA(DO-214CA)



MECHANICAL DATA

- .Case: DO-214CA/SMA
- .Terminals: Solderable per MIL-STD-750, Method 2026
- .Approx . Weight: 0.058g /
- .Standard packaging:12mm tape(EIA-481)

Dimiensions in inches and (milimeters)

Absolute Maximum Ratings and characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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

Type Number	SYMBOL	ES2AA	ES2BA	ES2DA	ES2GA	ES2JA	unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	140	420	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current .at $T_A = 55^{\circ}C$	$I_{F(AV)}$	2					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0					A
Maximum Forward Voltage at 1.5A DC	V_F	0.95			1.3	1.7	V
Maximum DC Reverse Current @ $T_A = 25^{\circ}C$	I_R	5.0					μA
At rated DC blocking voltage @ $T_A = 100^{\circ}C$		100.0					μA
Typical Junction Capacitance (Note1)	C_j	30					pF
Maximum reverserecovery tme (Note2)	t_{rr}	35					ns
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	90					$^{\circ}C / W$
Storage Temperature	T_{STG}	-55 to +150					$^{\circ}C$
Operation Junction Temperature	T_J	-55 to +150					$^{\circ}C$

 Note: 1. Pulse Test with PW=300 μ sec,2% Duty Cycle.

2. Mounted on P.C.Board with 5.0mm2(.013mm thick)copper pad areas.



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

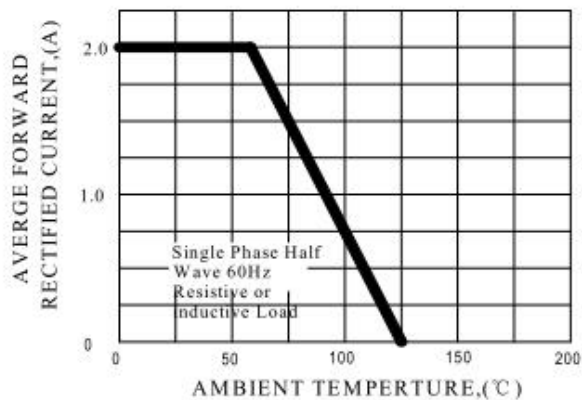


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

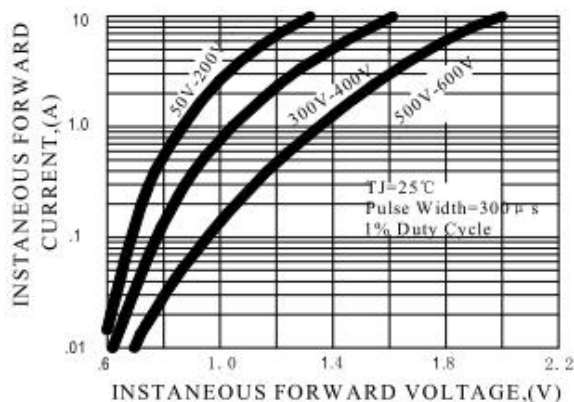


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

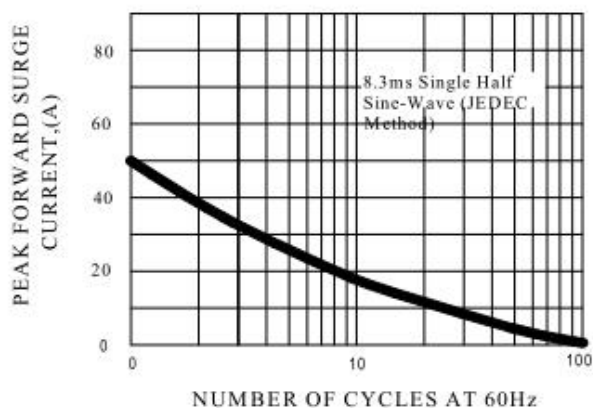


FIG.4-TYPICAL REVERSE CHARACTERISTICS

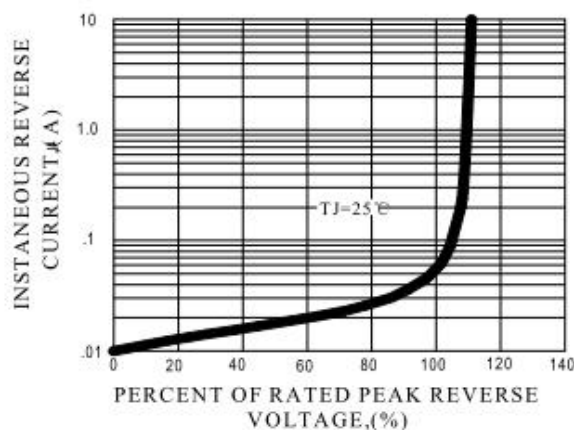


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

