Standard Surface Mounted Rectifiers

Reverse Voltage - 1600V to 2000V

Forward Current - 1.5 A

Pinning

1.Cathode	2.Anode



DO-214AC/SMA

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250 ℃/10 seconds at terminals

MECHANICAL DATA

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any
- Weight : 0.0023 ounce, 0.07 grams

Maximum Ratings And Electrical Characteristics

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

Parameter	Symbols	SM513	SM516	SM520	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1600	1800	2000	V
Maximum RMS voltage	V_{RMS}	1120	1260	1400	V
Maximum DC Blocking Voltage	V_{DC}	1600	1800	2000	V
Maximum average forward rectified current at T_L=100℃	$I_{F(AV)}$	1.5			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50.0			A
Maximum instantaneous forward voltage at 1.0A	V_F	1.10			V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 125°C	I_R	10.0 500			μA
Typical junction capacitance (Note1)	C_J	18.0			°C/W
Typical thermal resistance	$R_{\theta JA}$	80.0			°C
Operating junction and storage temperature range	T_j,T_{stg}	-55 to +150			°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

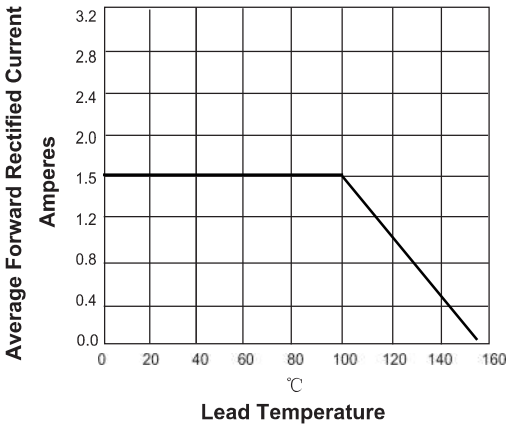


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

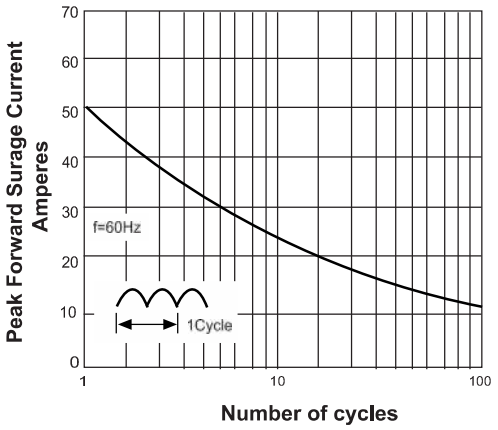


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

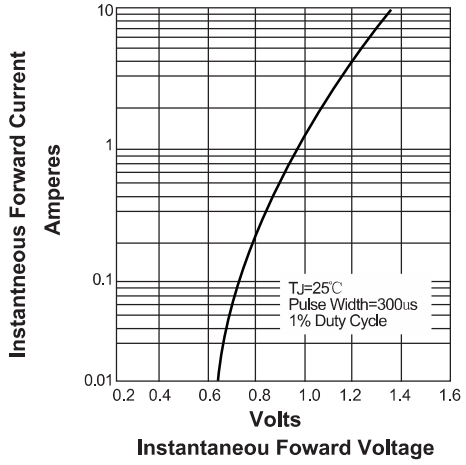
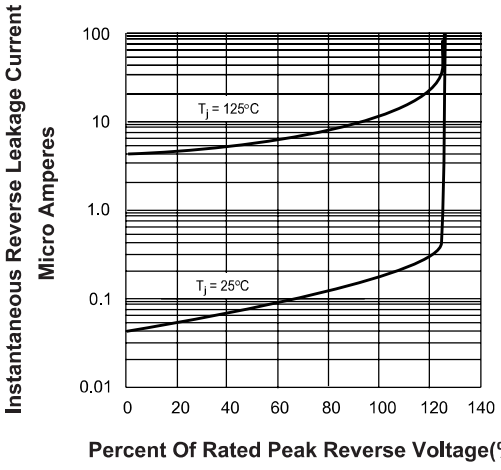


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

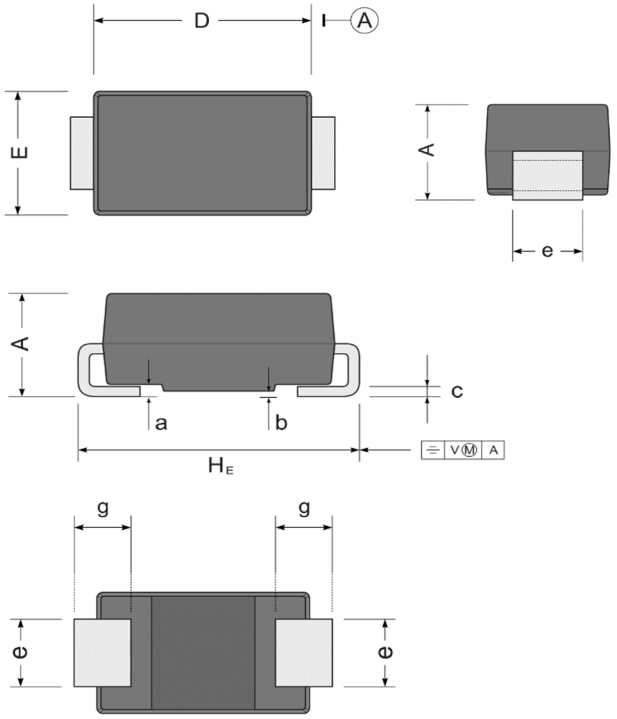


Ordering information

Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton

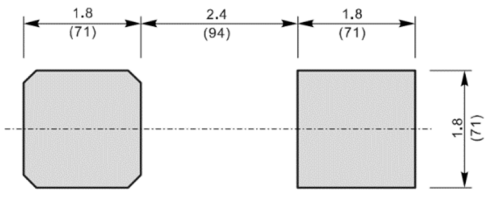
Package Dimensions

DO-214AC SMA



Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.9	2.45	75	96
D	4.0	4.5	157	181
E	2.5	2.8	100	110
H_E	4.7	5.2	185	205
c	0.15	0.31	6	12
e	1.3	1.8	51	71
g	0.9	1.5	35	59
b	0.05	0.2	2	7.9
a	0.3		12	

The recommended mounting pad size



Unit : mm (mil)

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