MSKSEMI 美森科
SEMICONDUCTOR

ESD TVS TSS MOV GDT PLED

MRA4001T3G-MS THRU MRA4007T3G-MS

Product specification

MRA4001T3G-MS THRU MRA4007T3G-MS

VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0 A

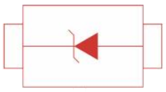
FEATURES

- Diffused junction
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.064 grams (approx.)

Reference News

SMA/DO-214AC	Schematic Diagram
	

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Marking

MRA4001T3G-MS	MRA4002T3G-MS	MRA4003T3G-MS	MRA4004T3G-MS
MSKSEMI R11	MSKSEMI R12	MSKSEMI R13	MSKSEMI R14
MRA4005T3G-MS	**MRA4006T3G-MS**	**MRA4007T3G-MS**	
MSKSEMI R15	MSKSEMI R16	MSKSEMI R17	

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	MRA4001 T3G-MS	MRA4002 T3G-MS	MRA4003 T3G-MS	MRA4004 T3G-MS	MRA4005 T3G-MS	MRA4006 T3G-MS	MRA4007 T3G-MS	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_L=100 ℃	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	5.0 100							uA
Typical Junction Capacitance (Note1)	C_J	10							pF
Typical Thermal Resistance (Note2)	$R\ _{JC}$	30							℃/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +125							℃

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
2.Thermal resistance junction to lead.

FIG. 1 - FORWARD CURRENT DERATING CURVE

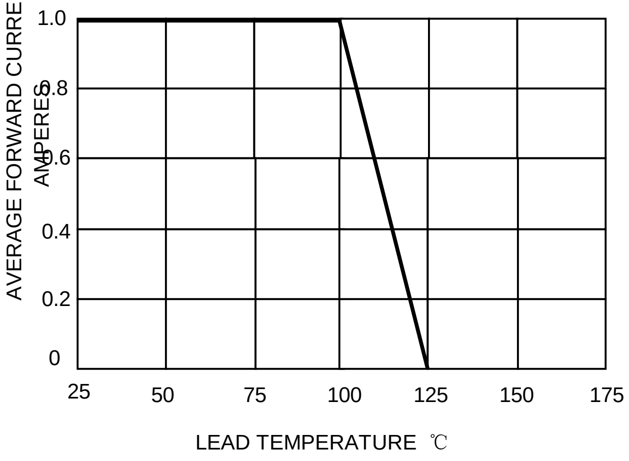


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

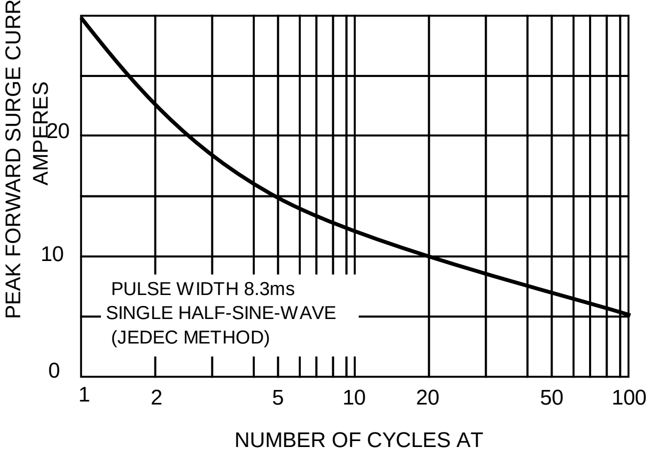


FIG.3-TYPICAL FORWARD CHARACTERISTICS

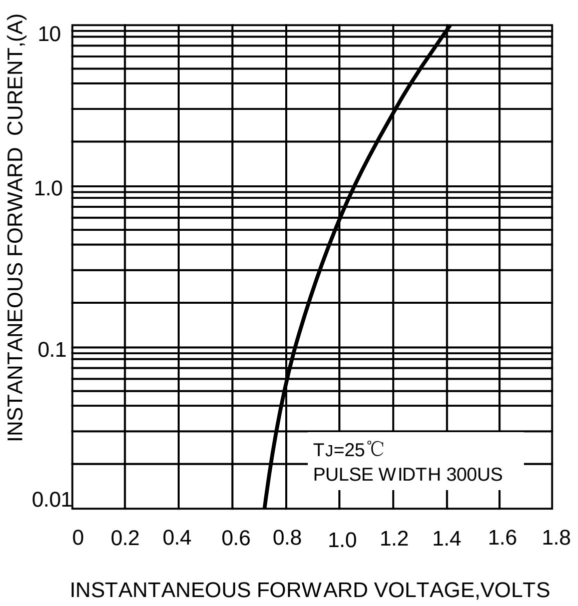
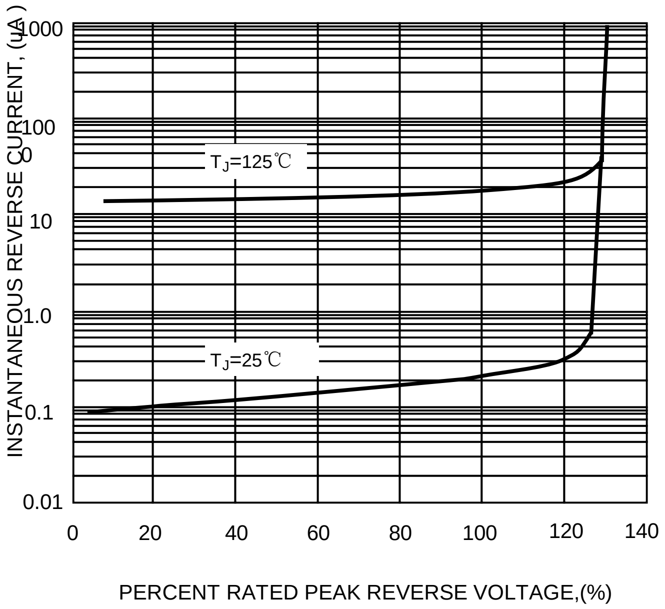
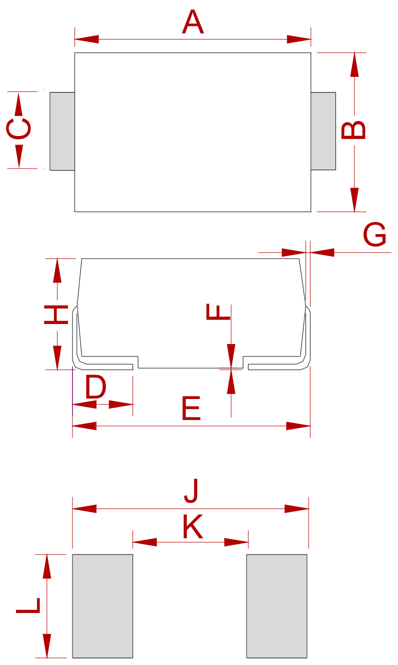


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE MECHANICAL DATA



DO-214AC (SMA)

Ref.	Dimensions			
	Millimeters		**Inches**	
	Min.	**Max.**	**Min.**	**Max.**
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

REEL SPECIFICATION

P/N	PKG	QTY
MRA4001T3G-MS THRU MRA4007T3G-MS	SMA	2000

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