

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



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GDT



PLED

MURAXXT3G-MS

Product specification

SURFACE MOUNT ULTRAFAST POWER RECTIFIERS DIODES

VOLTAGE RANGE: 50 - 600V

CURRENT: 1.0 A



Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O

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

PACKAGE OUTLINE	Marking
	
SMA(DO-214AC)	*** Representative VRRM

Maximum Ratings and Electrical Characteristics $T_A = 25^{\circ}\text{C}$ unless otherwise specified Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MURA105 T3G-MS	MURA110 T3G-MS	MURA115T 3G-MS	MURA120 T3G-MS	MURA130T 3G-MS	MURA140 T3G-MS	MURA160T 3G-MS	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current at T _L =55℃	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	V _F	0.95				1.25		1.7	V
Maximum DC reverse current at rated DC blocking voltage T _A =25℃ T _A =100℃	I _R	5.0 50.0							μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	35							ns
Typical junction capacitance (NOTE 2)	C _J	15.0							pF
Typical thermal resistance (NOTE 3)	RθJA	60.0							℃/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							℃

Note: 1.Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

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Fig. 1 — Forward Current Derating Curve

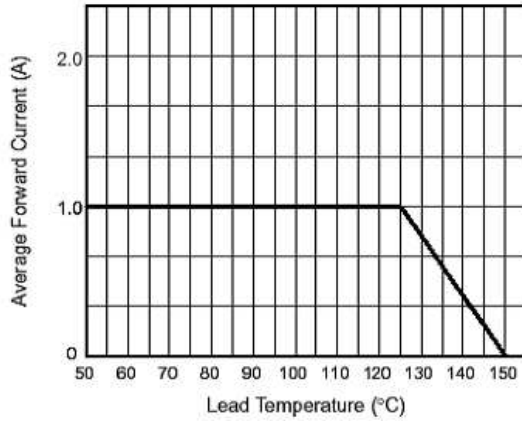


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

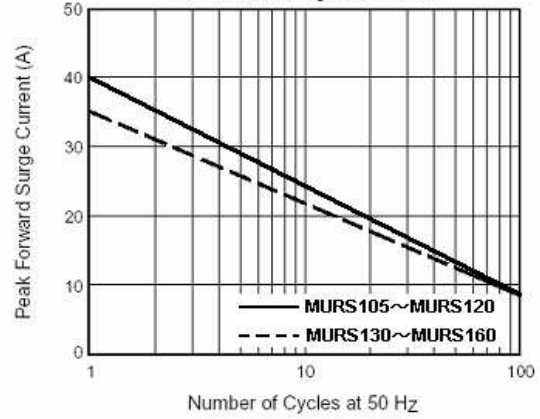


Fig. 3 — Typical Instantaneous Forward Characteristics

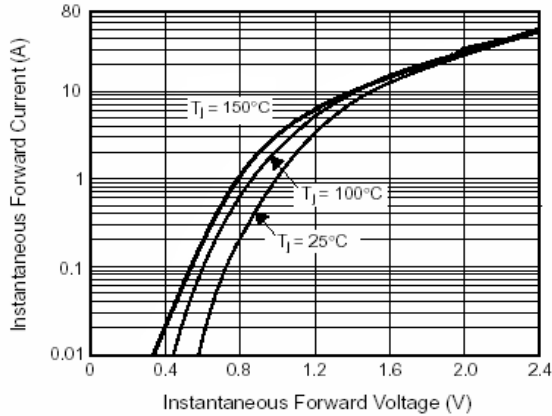


Fig. 4 — Typical Reverse Leakage Characteristics

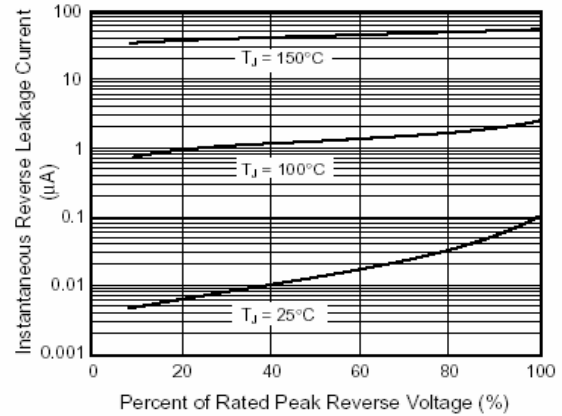
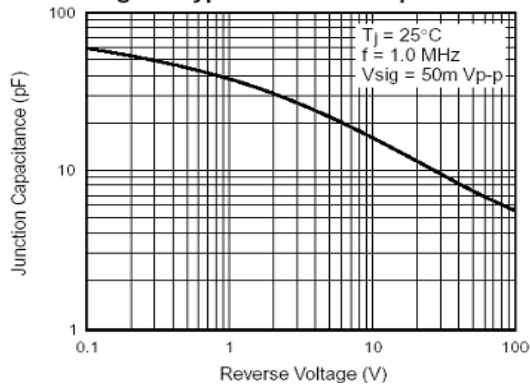
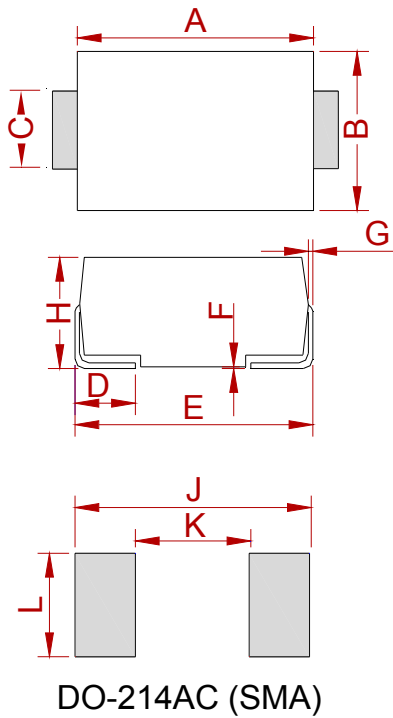


Fig. 5 — Typical Junction Capacitance



PACKAGE MECHANICAL DATA



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
MURAXXT3G-MS	DO-214AC(SMA)	2000

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