



MURS420 THRU MURS460

4.0AMP SURFACE MOUNT HIGH EFFICIENCY RECTIFIERS

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Fast switching speed

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.093 grams

Marking

Type number	Marking code
MURS4XX	MUR4XX

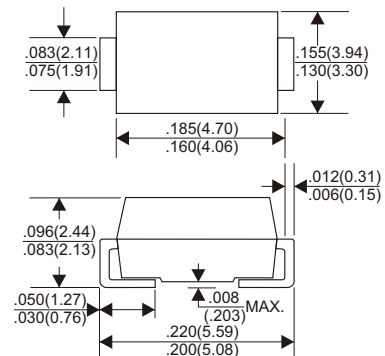
VOLTAGE RANGE

200 to 600 Volts

CURRENT

4.0 Ampere

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	MURS420	MURS440	MURS460	UNITS
Maximum Recurrent Peak Reverse Voltage	200	400	600	V
Maximum RMS Voltage	140	280	420	V
Maximum DC Blocking Voltage	200	400	600	V
Maximum Average Forward Rectified Current at Ta=55°C		4.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		100		A
Maximum Instantaneous Forward Voltage at 4.0A	1.0	1.15	1.25	V
Maximum DC Reverse Current at Rated DC Blocking Voltage		3		μA
		200		μA
Maximum Reverse Recovery Time (Note 1)		50		nS
Typical Junction Capacitance (Note 2)		75		pF
Operating and Storage Temperature Range Tj, Tstg		-65 — +150		°C

NOTES:

- Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
- Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (MURS420 THRU MURS460)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

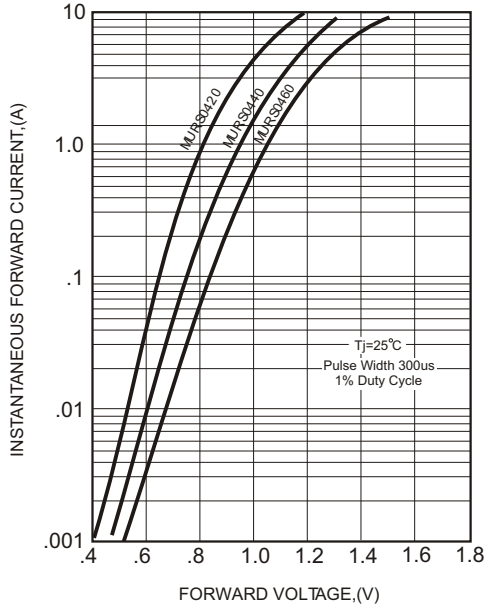


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

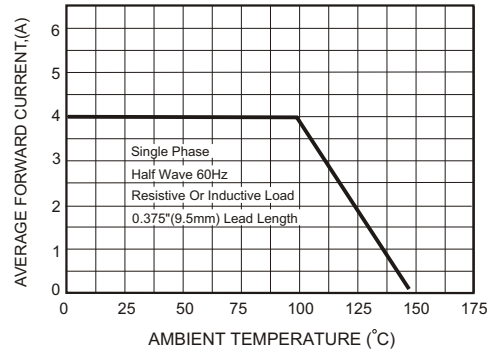
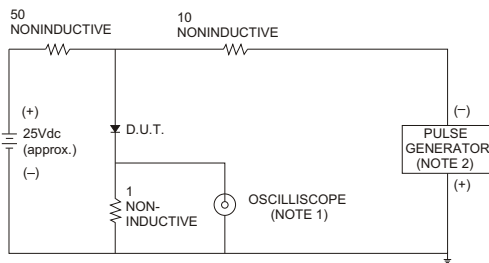


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

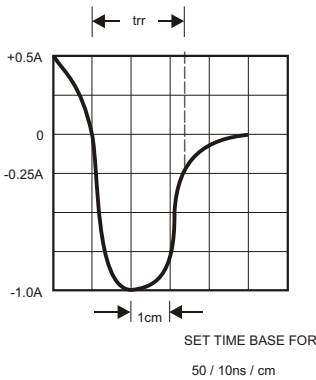


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

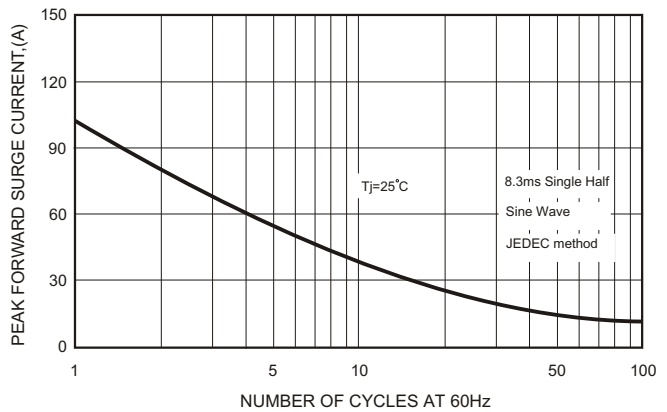


FIG.5-TYPICAL JUNCTION CAPACITANCE

