

## 4.0 AMP SUPER FAST RECTIFIERS

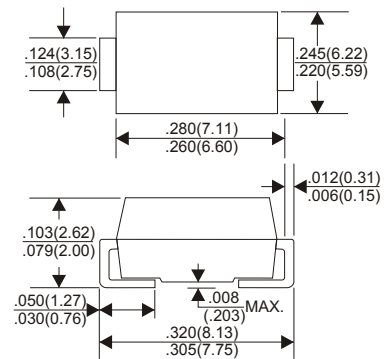
### Features:

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* High surge current capability
- \* Both normal and Pb free product are available:
- \* Normal:80~95%Sn,5~20%Pb
- \* Pb free:99 Sn above can meet Rohs enviroment substance directive request

### 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: 0.21 grams

**DO-214AB(SMC)**



## 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%.

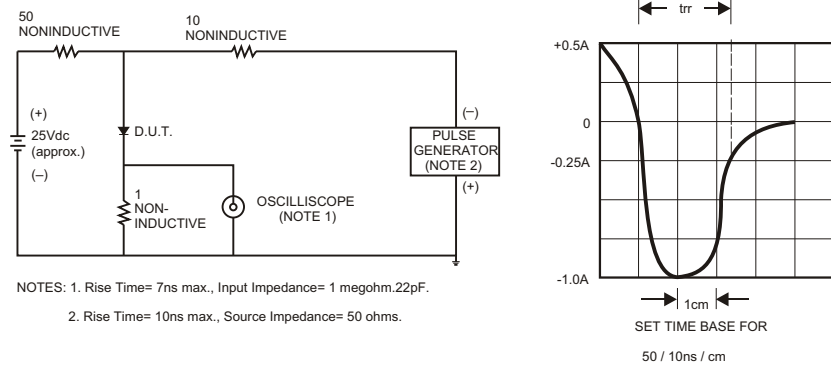
TYPE NUMBER	MURS 405	MURS 410	MURS 415	MURS 420	MURS 430	MURS 440	MURS 460	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	150	200	300	400	600	V
Maximum RMS Voltage	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current	4.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 4.0A	0.95		1.20		1.60			V
Maximum DC Reverse Current Ta=25°C	5.0							uA
at Rated DC Blocking Voltage T a=100 C	150							uA
Maximum Reverse Recovery Time (Note 1)	35							nS
Typical Junction Capacitance (Note 2)	25							pF
Operating and Storage T emperature Range Tj, TSTG	-65 — +150							°C

**NOTES:**

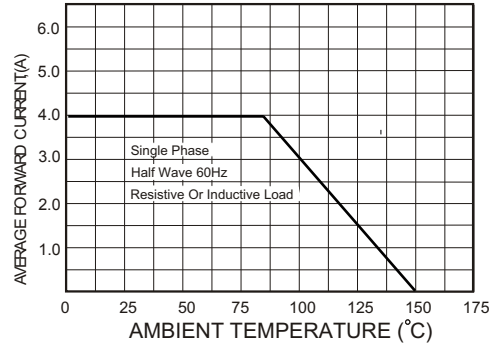
1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**RATING AND CHARACTERISTIC CURVES (MURS405 THRU MURS460)**

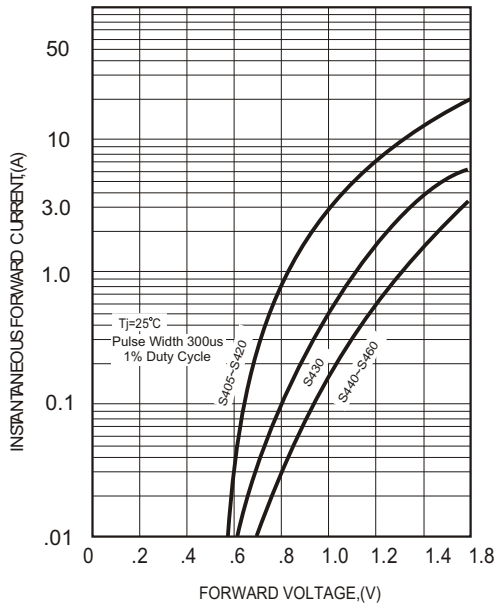
**FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



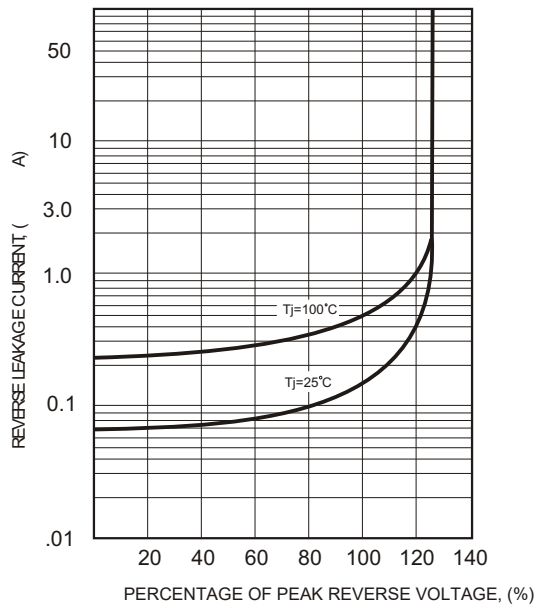
**FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE**



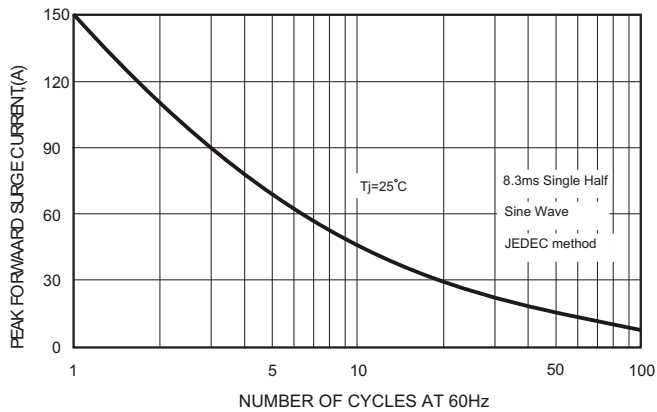
**FIG.3-TYPICAL FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.6-TYPICAL JUNCTION CAPACITANCE**

