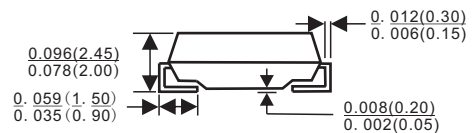
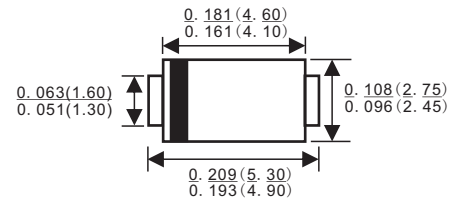




Features

- ◇ High efficiency, low VF
- ◇ High current capability
- ◇ High junction temperature 175°C
- ◇ High surge current capability
- ◇ Low Leakage
- ◇ Low power loss, high efficiency
- ◇ High current capability
- ◇ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.

DO-214AC/SMA



Mechanical Data

- ◇ Case: JEDEC DO-214AC, SMA, Molded plastic
- ◇ Epoxy: UL 94V-0 rated flame retardant
- ◇ Polarity: Color band denotes cathode
- ◇ High temperature soldering guaranteed:
260°C/10 seconds/.375" (9.5mm) lead
Lengths at 5 lbs. (2.3kg) tension
- ◇ Mounting position: ANY
- ◇ Weight: 0.093 gram

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 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	Symbol	MURSL160A	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current .TC=135°C	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	35	A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	3.735	A ² s
Maximum Instantaneous Forward Voltage @ $I_F=1.0A, T_J=25^\circ C$ @ $I_F=1.0A, T_J=150^\circ C$	V_F	1.3 1.05	V
Maximum DC Reverse current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=150^\circ C$	I_R	1.0 50	μA
Maximum Reverse Recovery Time($I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$)	T_{rr}	60	nS
Typical junction capacitance: $V_R=4.0V, f=1MHz$	C_J	10	pF
Maximum thermal resistance (PCB mounted on 0.2x0.2" (5.0x5.0mm) copper pad area)	$R_{\theta JA}$	70	°C/W
	$R_{\theta JL}$	30	°C/W
Operating temperature range	T_J	-55 to +175	°C
Storage temperature range	T_{STG}	-55 to +175	°C

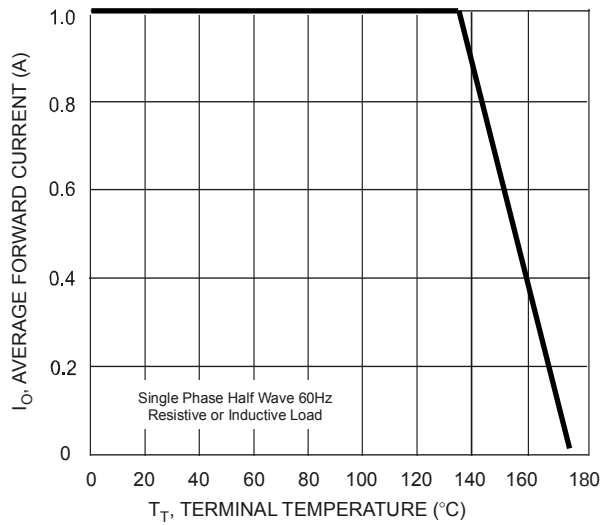


Fig. 1 Forward Current Derating Curve

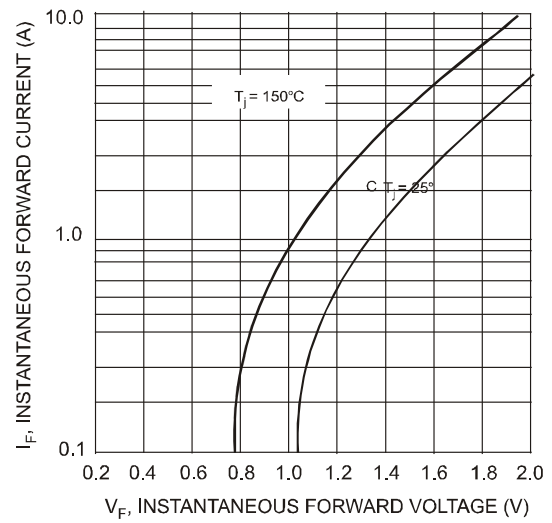


Fig. 2 Typical Forward Characteristics

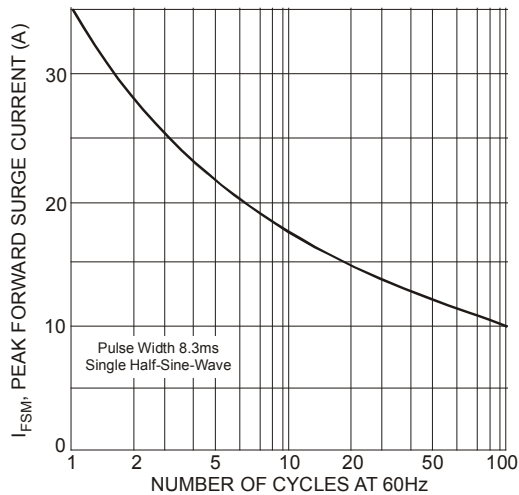


Fig. 3 Surge Current Derating Curve

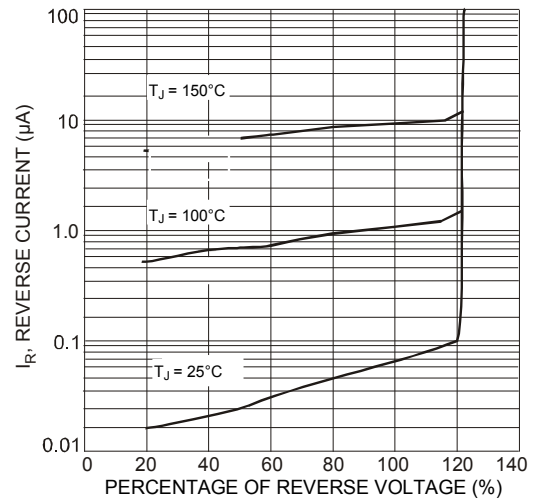
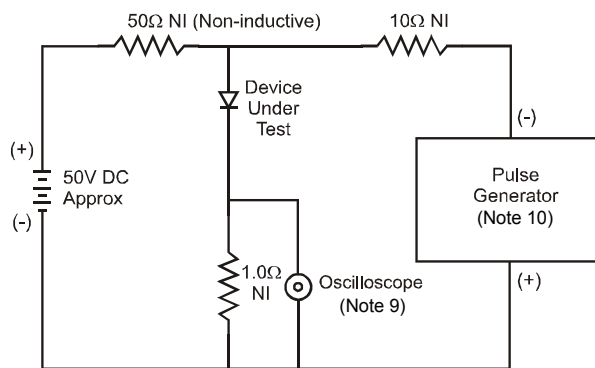
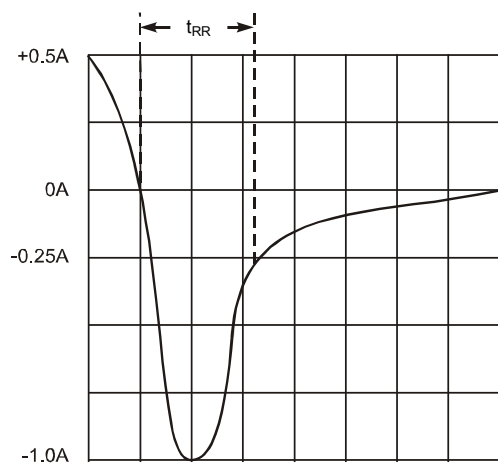


Fig. 4 Typical Reverse Characteristics



Notes:
 9. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 10. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 50/100 ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00