

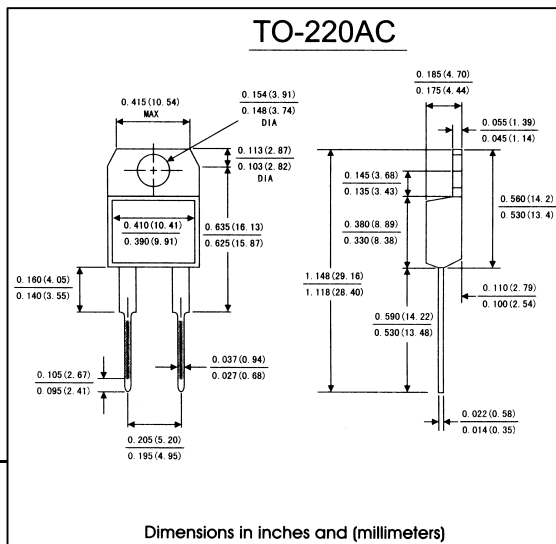
FEATURES

- . Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- . Metal silicon junction ,majority carrier conduction
- . Guard ring for overvoltage protection
- . Low power loss,high efficiency
- . High current capability ,Low forward voltage drop
- . Single rectifier construction
- . High surge capability
- . For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- . High temperature soldering guaranteed: 250°C/10 seconds

0.25"(6.35mm)from case

MECHANICAL DATA

- . **Case:** JEDEC DO-220AC molded plastic body
- . **Terminals:** lead solderable per MIL-STD-750,method 2026
- . **Polarity:** As marked
- . **Mounting Position:** Any
- . **Weight:** 0.08 ounce, 2.24 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified,Single phase,half wave,resistive or inductive)

load. For capacitive load,derate by 20%)

	Symbols	SR735	SR745	SR750	SR760	Units
Maximum repetitive peak reverse voltage	V _{RRM}	35	45	50	60	Volts
Maximum RMS voltage	V _{RMS}	25	32	35	42	Volts
Maximum DC blocking voltage	V _{DC}	35	45	50	60	Volts
Maximum average forward rectified current(see Fig.1)	I _(AV)	7.5				Amps
Repetitive peak forward current(square wave, 20KHz) at T _c =105°C	I _{FRM}	15.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150.0				Amps
Maximum instantaneous forward voltage at 7.5 A(Note 1)	V _F	0.65		0.75		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25°C	1.0				mA
	TA=125°C	15		50		
Typical thermal resistance(Note 2)	R _{θ JC}	2.5				°C/W
Operating junction temperature range	T _J	-65 to +150				°C
storage temperature range	T _{STG}	-65 to +150				°C

Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR735 THRU SR760(SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

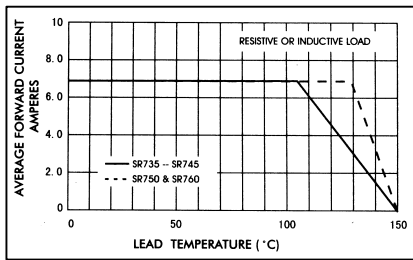


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

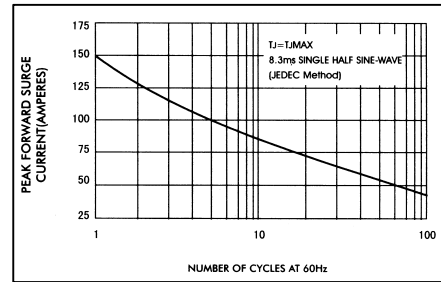


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

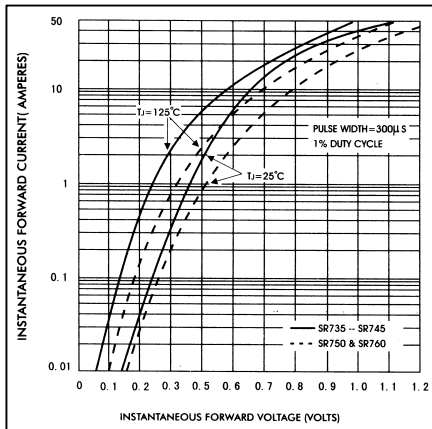


FIG.4-TYPICAL REVERSE CHARACTERISTICS

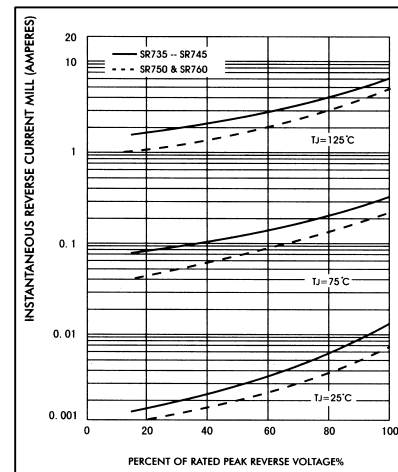


FIG.5-TYPICAL JUNCTION CAPACITANCE

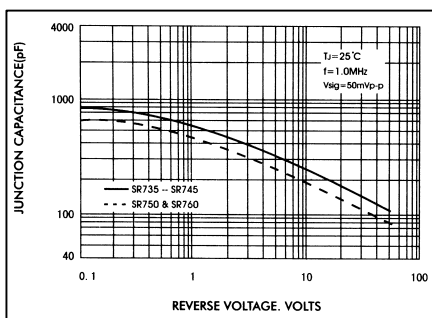


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

