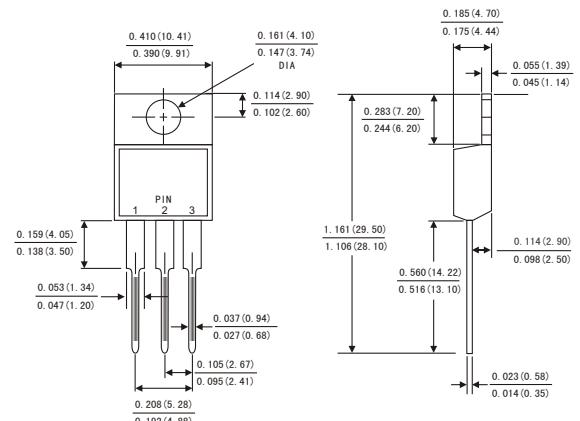


FEATURES

- 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
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed: 260°C/10 seconds,, 0.25"(6.35mm) from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



TO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08 ounce, 2.24 grams

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	SR 1620CT	SR 1630CT	SR 1640CT	SR 1650CT	SR 1660CT	SR 1680CT	SR 16100CT	SR 16150CT	SR 16200CT	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current (see Fig.1)	I _(AV) Per leg Total device						8.0				Amps
							16.0				
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}						200.0				Amps
Maximum instantaneous forward voltage at 16.0 A	V _F		0. 60		0.75		0.85	0.90	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	I _R T _c =25°C T _c =125°C					0.2					mA
			30				50				
Typical thermal resistance (Note 2)	R _{θJC}					3.0					°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 μ s pulse width, 1% duty cycle

2. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR1620CT THRU SR16200CT

FIG.1-FORWARD CURRENT DERATING CURVE

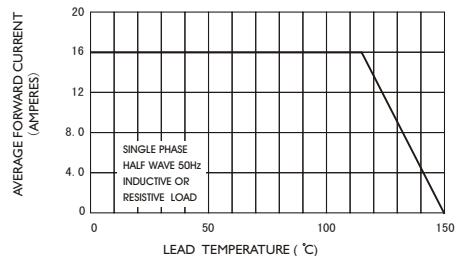


FIG.4-TYPICAL JUNCTION CAPACITANCE

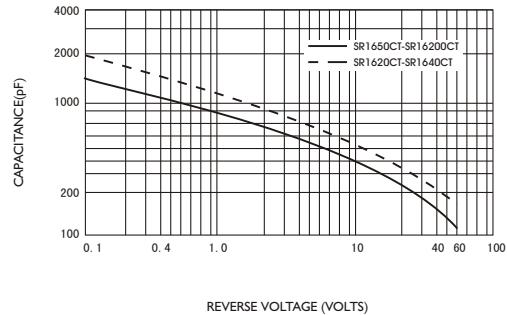


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

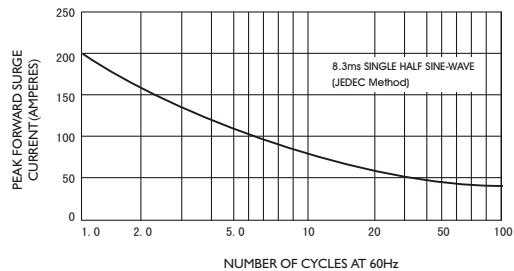


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

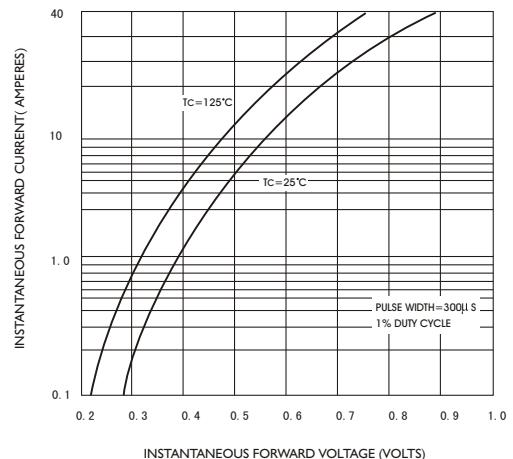


FIG.3-TYPICAL REVERSE CHARACTERISTICS

