SR735 THRU SR760(SINGLE CHIP)

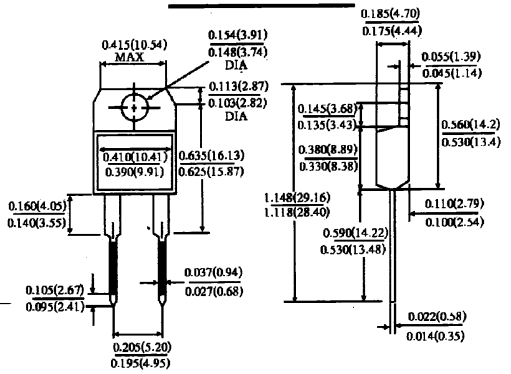
7.5AMPS. SCHOTTKY BARRIER RECTIFIERS

JGD

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V – O
- 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℃/10 seconds, 0.25″(6.35mm) from case

TO-220AC



Dimensions in inches and (millimeters)

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ 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 wavr, 20KHZ) at Tc = 105℃	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) $T_A = 25℃$	I_R	1.0				mA
$T_A = 125℃$		15		50		
Typical thermal resistance (Note 2)	$R_{\theta JC}$	2.5				°c/w
Operating junction temperature range	T_J	– 65 to + 150				℃
Storage temperature range	T_{STG}	– 65 to + 150				℃

Notes: 1. Pulse fest: 300μ s pulse width, 1% duty cycle

2. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR735 THRU SR760(SINGLE CHIP)

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FIG.1 – FORWARD CURRENT DERATING CURVE

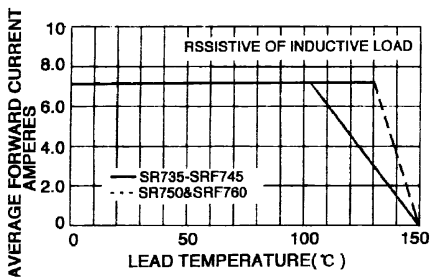

FIG.2 – MAXIMUM NON – REPETITIVE PEAK FORWARD SURGE CURRENT

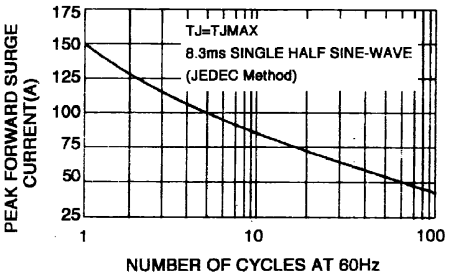

FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

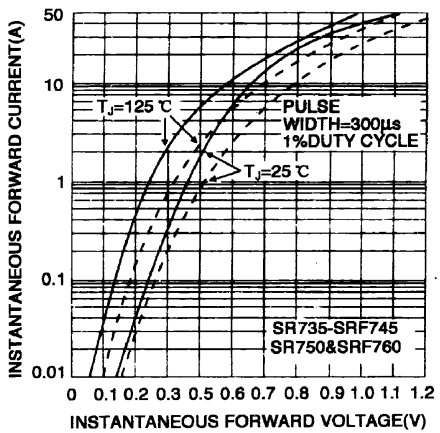

FIG.4 – TYPICAL REVERSE CHARACTERISTICS

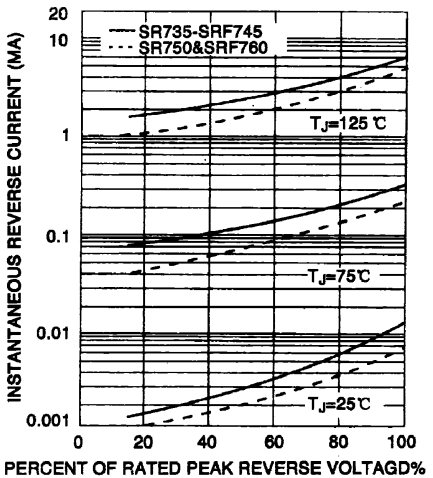

FIG.5 – TYPICAL JUNCTION CAPACITANCE

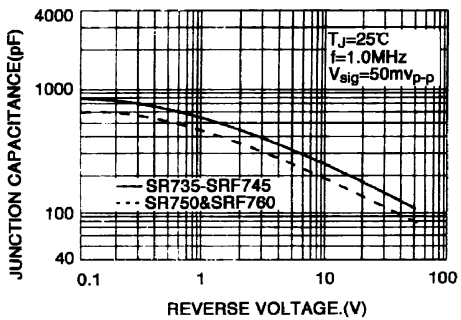

FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE