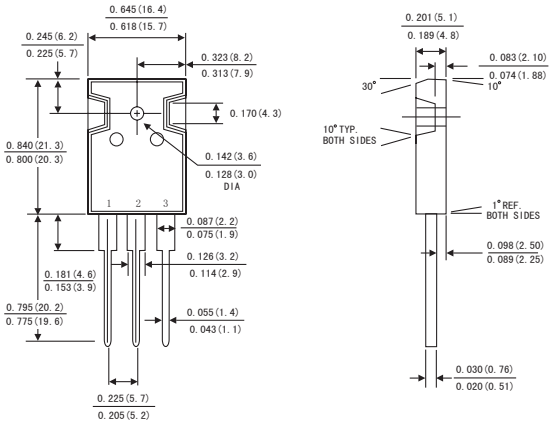
SCHOTTKY BARRIER RECTIFIER

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:260 °C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU

TO-247AB



Dimensions in inches and (millimeters)

Mechanical Data:

- Case: JEDEC TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

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	KSR 6040PT	KSR 6045PT	KSR 6060PT	KSR 6080PT	KSR 60100PT	KSR 60150PT	KSR 60200PT	Units
Maximum repetitive peak reverse voltage		V_{RRM}	40	45	60	80	100	150	200	Volts
Maximum RMS voltage		V_{RMS}	28	32	42	56	70	105	140	Volts
Maximum DC blocking voltage		V_{DC}	40	45	60	80	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	$I_{(AV)}$	30. 0							Amps
	Total device		60.0							
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	400							Amps
Maximum instantaneous forward voltage at 30.0 A per diode		V_F	0.70		0.75	0.85		0.90	0. 95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_A=25°C	I_R	200			50				μA
	T_A=100°C		20							mA
Typical thermal resistance (Note 2)		$R_{\theta JC}$	1. 5							°C/W
Operating junction temperature range		T_J	-55 to+150							°C
Storage temperature range		T_{STG}	-55 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 KSR6040PT THRU KSR60200PT

FIG.1-FORWARD CURRENT DERATING CURVE

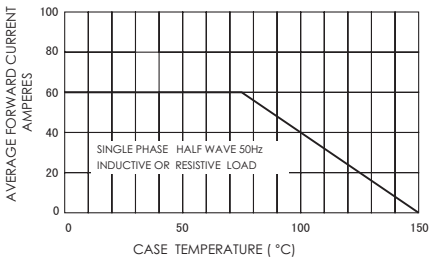


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

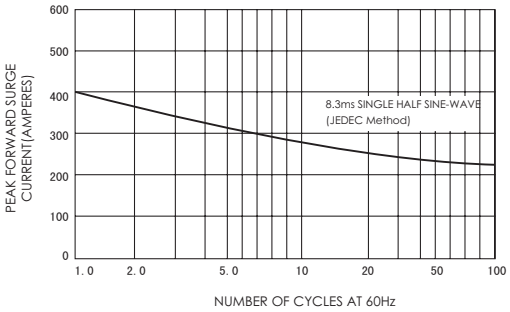


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

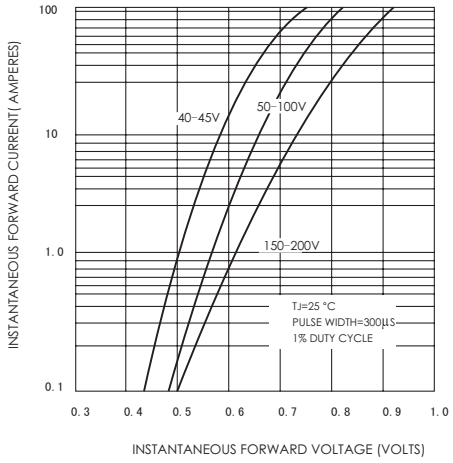


FIG.4-TYPICAL REVERSE CHARACTERISTICS