

# Schottky Barrier Rectifier

## Features:

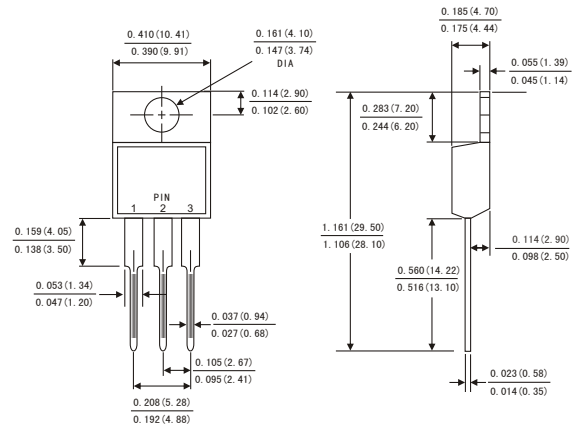
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- For use in low voltage ,high frequency 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



## 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: 0.08ounce, 2.24 grams

## TO-220AB



## 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 1020CT	KSR 1030CT	KSR 1040CT	KSR 1050CT	KSR 1060CT	KSR 1080CT	KSR 10100CT	KSR 10150CT	KSR 10200CT	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)	Per leg	5.0									Amps	
	Total device	10.0										
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 10.0 A(Note 1 )	$V_F$	0.60			0.75		0.85		0.90		0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_a = 25^\circ C$	0.2									mA	
	$T_a = 125^\circ C$	15			50							
Typical thermal resistance (Note 2)	$R_{\theta JC}$	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  $\mu s$  pulse width, 1% duty cycle  
 2. Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

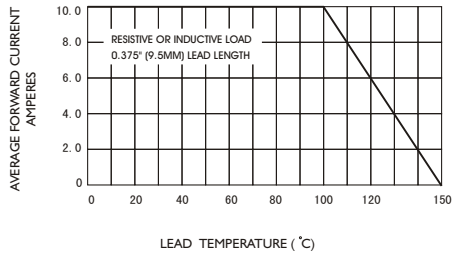


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

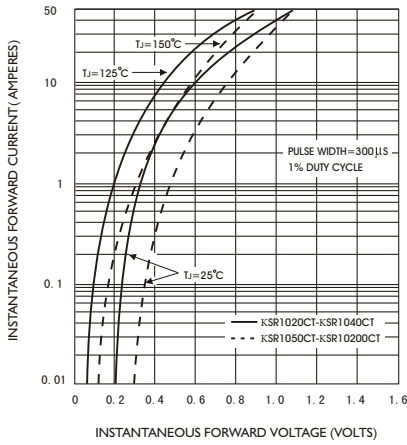


FIG.5-TYPICAL JUNCTION CAPACITANCE

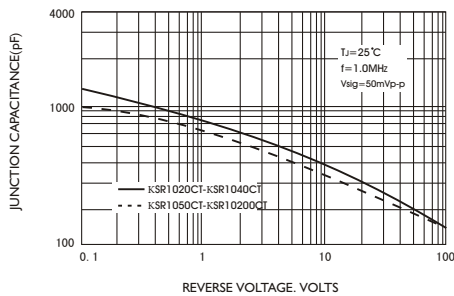


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

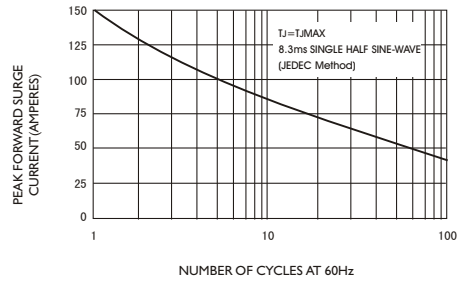


FIG.4-TYPICAL REVERSE CHARACTERISTICS

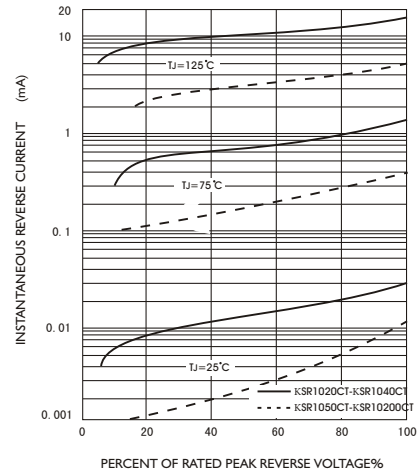


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

