

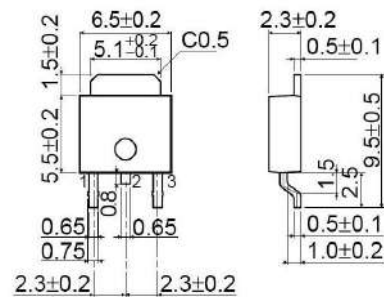
SCHOTTKY BARRIER RECTIFIER

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
- 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-252



Mechanical Data:

- Case: JEDEC TO-252 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 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	KSRD 2020CT	KSRD 2030CT	KSRD 2045CT	KSRD 2050CT	KSRD 2060CT	KSRD 2080CT	KSRD 20100CT	KSRD 20150CT	KSRD 20200CT	Units	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	45	50	60	80	100	150	200	Volts	
Maximum RMS voltage	V _{RMS}	14	21	31.5	35	42	56	70	105	140	Volts	
Maximum DC blocking voltage	V _{DC}	20	30	45	50	60	80	100	150	200	Volts	
Maximum average forward rectified current(see Fig.1)	Per leg	10.0									Amps	
	Total device	20.0										
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 20.0 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)	T _c = 25°C	0.2									mA	
	T _c = 125°C	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 μs pulse width,1% duty cycle
 2.Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

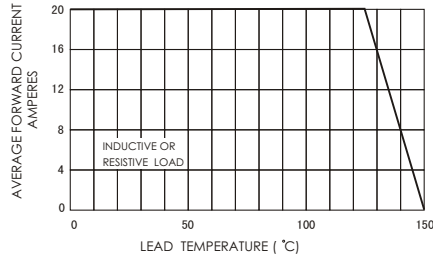


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

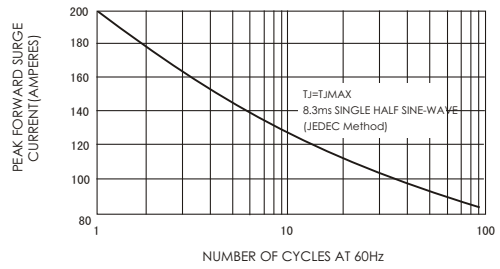


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

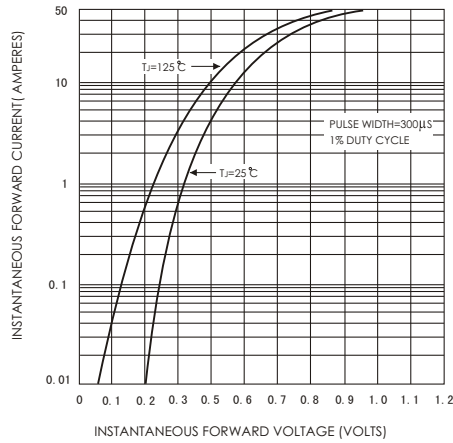


FIG.4-TYPICAL REVERSE CHARACTERISTICS

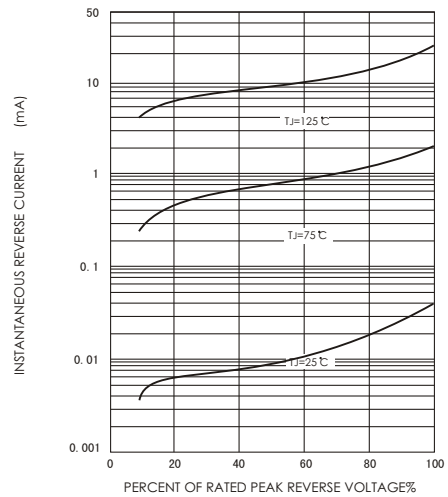


FIG.5-TYPICAL JUNCTION CAPACITANCE

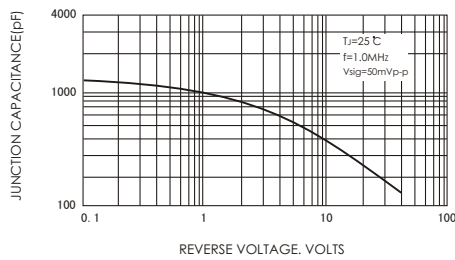


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

