

SCHOTTKY BARRIER RECTIFIER

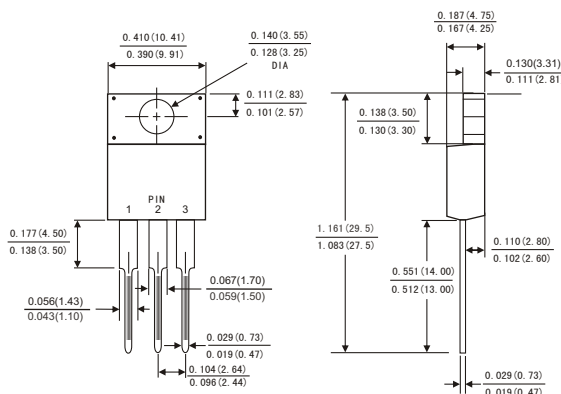
Features:

- 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

Mechanical Data:

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

ITO-220AB



Dimensions in inches and (millimeters)

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	KSRF 2020CT	KSRF 2030CT	KSRF 2045CT	KSRF 2050CT	KSRF 2060CT	KSRF 2080CT	KSRF 20100CT	KSRF 20150CT	KSRF 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		0.88	0.90		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_c=25^{\circ}C$	0.05			0.005						mA
	$T_c=125^{\circ}C$	3.0			5.0						
Typical thermal resistance (Note 2)	$R_{\theta JC}$	4.0									°C/W
Operating junction temperature range	T_J	-65 to +175									°C
Storage temperature range	T_{STG}	-65 to +175									°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

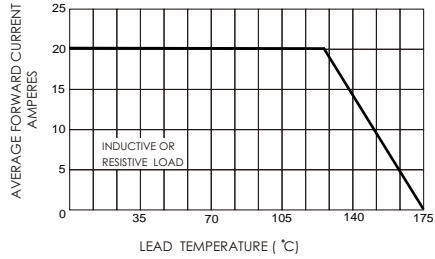


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

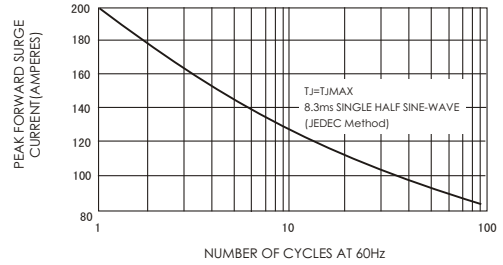


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

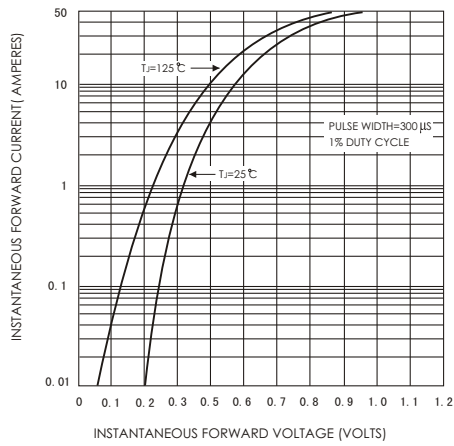


FIG.4-TYPICAL REVERSE CHARACTERISTICS

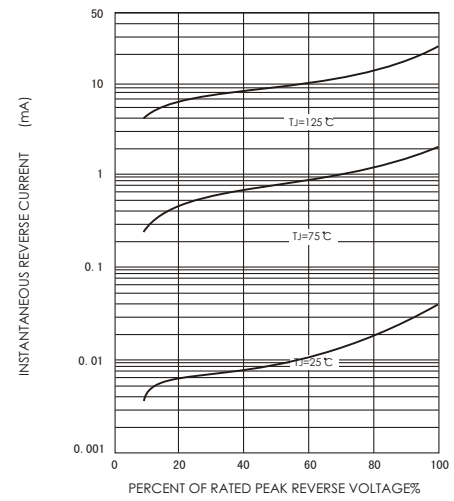


FIG.5-TYPICAL JUNCTION CAPACITANCE

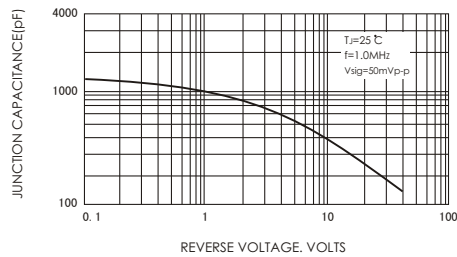


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

