

SCHOTTKY BARRIER RECTIFIER

Features :

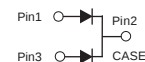
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low 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 2011/65/EU

Mechanical Data :

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked.
- Mounting Position: Any

TO-220AB

KSR10300CT



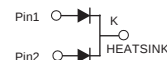
ITO-220AB

KSRF10300CT



TO-263

KSR10300D1



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	KSR10300CT,KSRF10300CT ,KSR10300D1				Units
Maximum repetitive peak reverse voltage		V _{RRM}	300				Volts
Maximum RMS voltage		V _{RMS}	210				Volts
Maximum DC blocking voltage		V _{DC}	300				Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I(AV)	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
Forward voltage at 5.0 A per leg(Notes 1)		V _F	TYP.	0.85	MAX.	0.9	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	T _A =25°C	I _R	TYP.	30	MAX.	80	μA
	T _A =125°C		TYP.	/	MAX.	1	mA
Typical thermal resistance (Notes 2)		R _{JC}	2.5				°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: 300μ s pulse width,1% duty cycle
2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

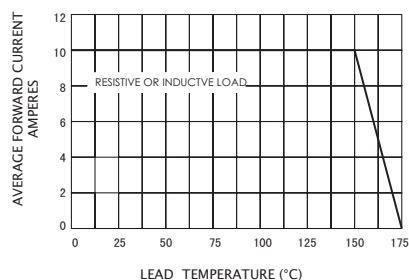


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

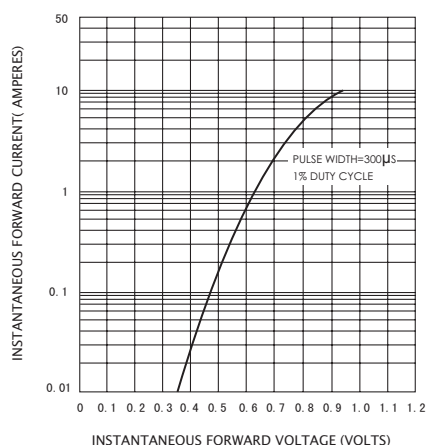


FIG.5-TYPICAL JUNCTION CAPACITANCE

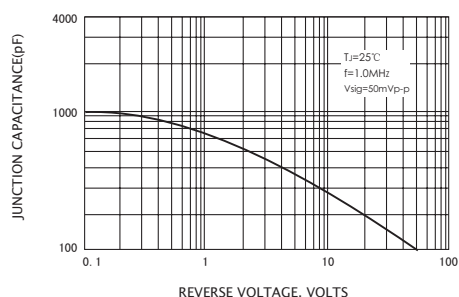


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

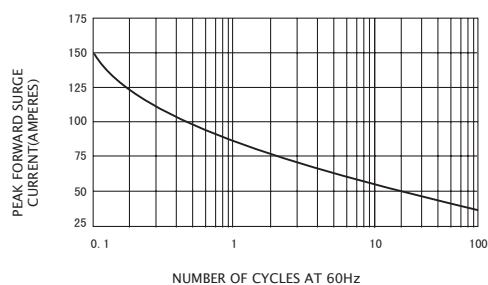


FIG.4-TYPICAL REVERSE CHARACTERISTICS

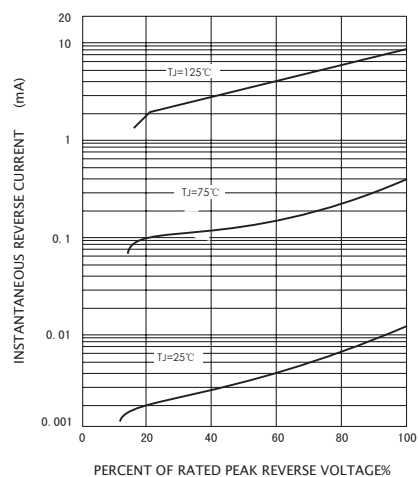
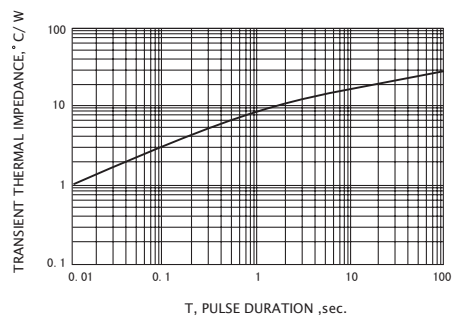
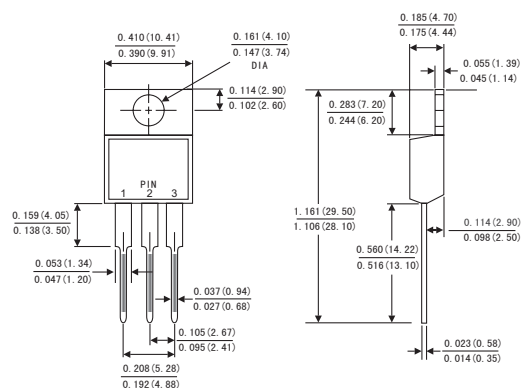


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

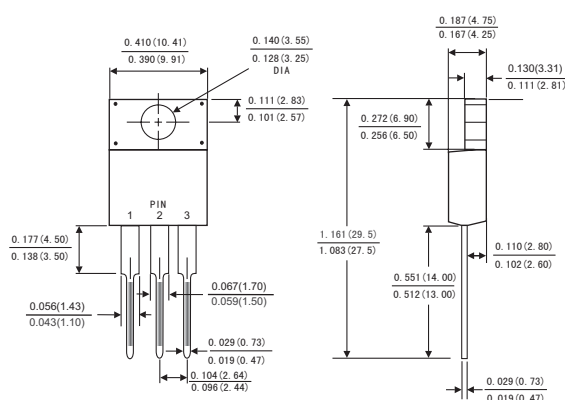


PACKAGE OUTLINE DIMENSIONS

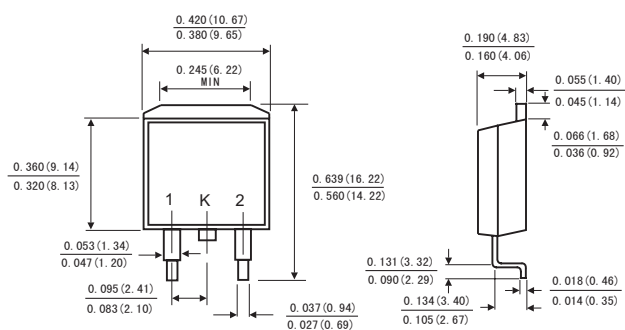
TO-220AB



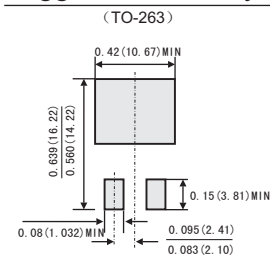
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Suggested Pad Layout



Dimensions in inches and (millimeters)