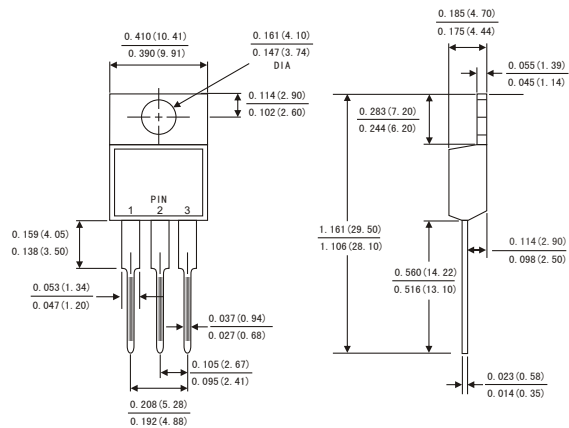


# SCHOTTKY BARRIER RECTIFIER

## 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 2002/95/EC and WEEE 2002/96/EC

## TO-220AB



## 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

## 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 3020CT	KSR 3030CT	KSR 3040CT	KSR 3045CT	KSR 3060CT	KSR 3080CT	KSR 30100CT	KSR 30150CT	KSR 30200CT	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	45	60	80	100	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	32	42	56	70	105	140	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	45	60	80	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	15.0									Amps
	Total device	30.0									
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	250.0									Amps
Maximum instantaneous forward voltage at 15.0	$V_F$	0.56			0.60		0.85			Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_c=25^{\circ}C$	0.2									mA
	$T_c=125^{\circ}C$	30			50						
Typical thermal resistance (Note 2)	$R_{\theta JC}$	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

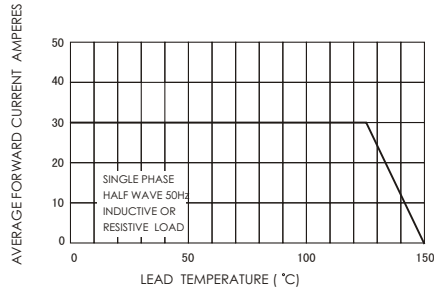


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

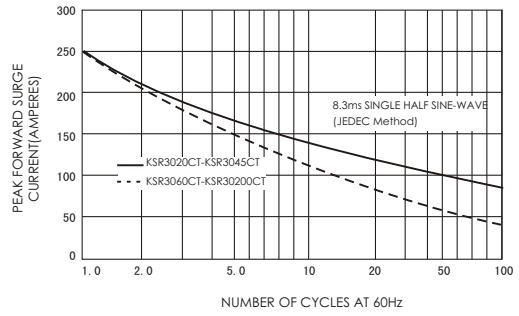


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

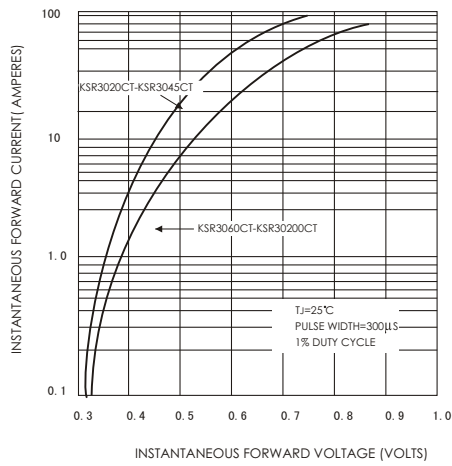
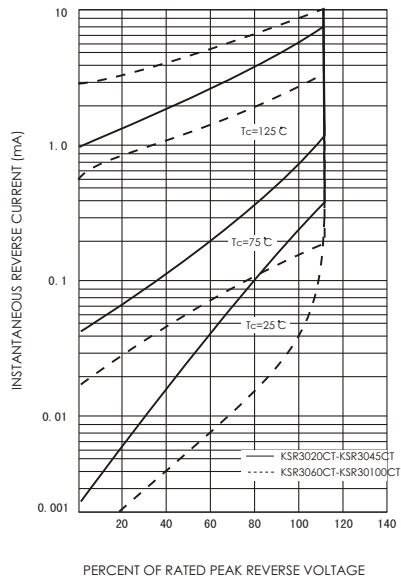
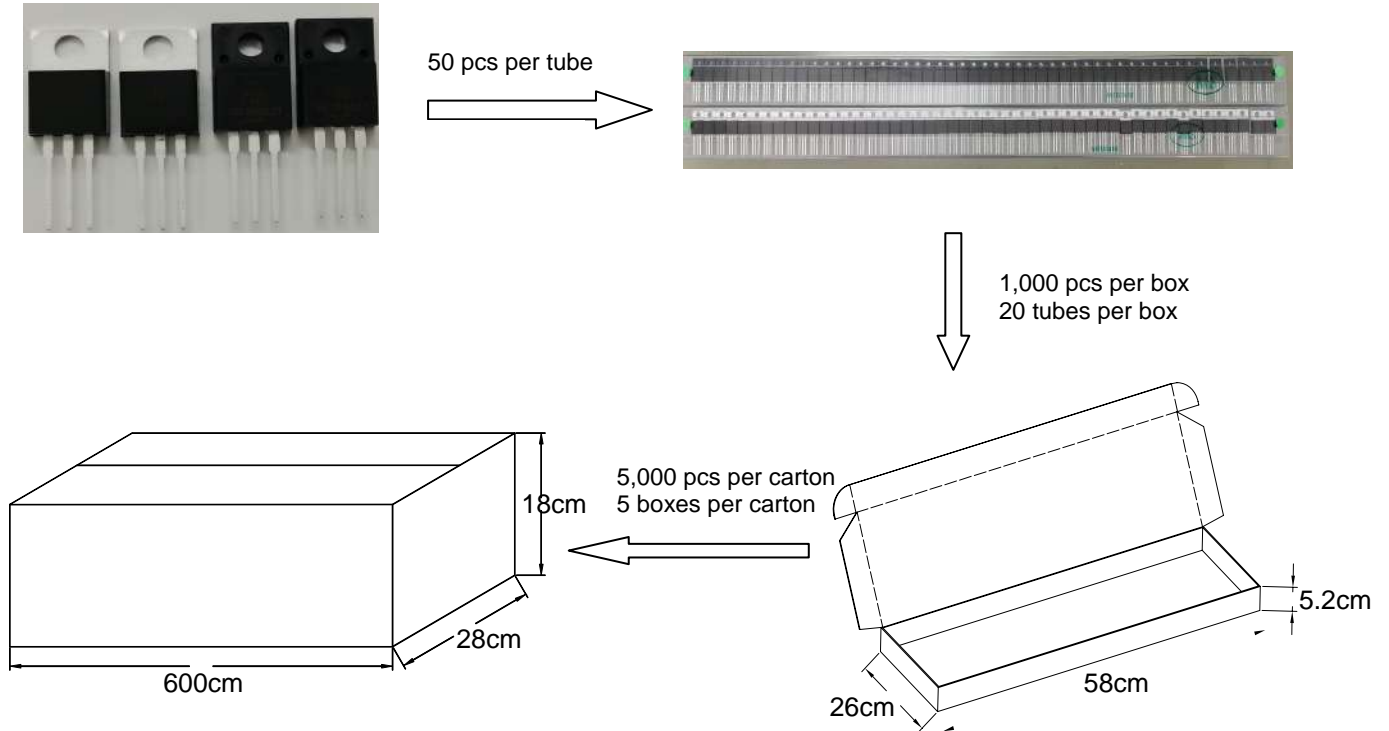


FIG.4-TYPICAL REVERSE CHARACTERISTICS

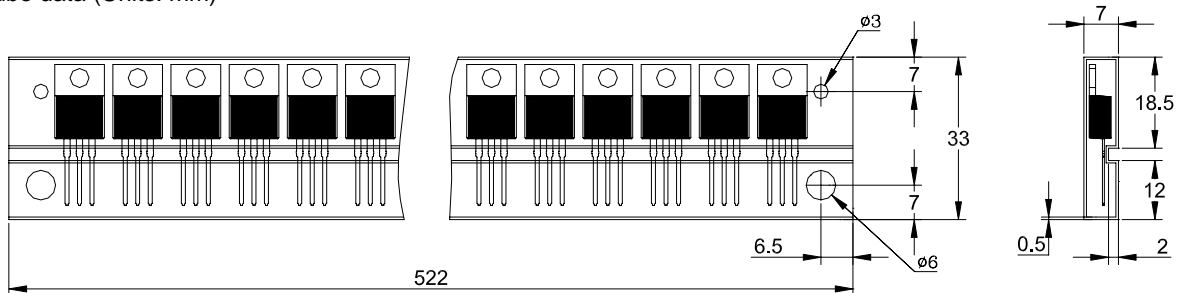


## Packaging Specifications of Tube Pack for TO-220AB and ITO-220AB

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



2. Tube data (Units: mm)



### Storage

1 It is recommended to store the products in the following conditions:

Humidity: 75% R.H. Max.

Temperature : 0°C ~35°C (32°F ~95°F)

2 Shelf life : 12 month at < 0°C ~35°C (32°F ~95°F) and < 75% R.H.