

ITO-220AB Plastic-Encapsulate Diode

SCHOTTKY BARRIER RECTIFIER

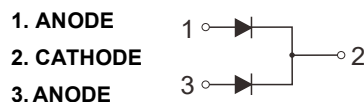
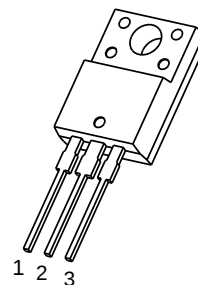
Features

- 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



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 2020LCT	KSRF 2030LCT	KSRF 2040LCT	KSRF 2050LCT	KSRF 2060LCT	KSRF 2080LCT	KSRF 20100LCT	KSRF 20150LCT	KSRF 20200LCT	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 Total device	I(AV)	10.0 20.0									Amps
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	0.45			0.5		0.75		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _c =25℃	I _R	0.2									mA
	T _c =125℃		30			50						
Typical thermal resistance (Note 2)		R _{θJC}	3.0									℃/W
Operating junction temperature range		T _J	-65 to +150									℃
Storage temperature range		T _{STG}	-65 to +150									℃

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
 2.Thermal resistance from junction to case

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

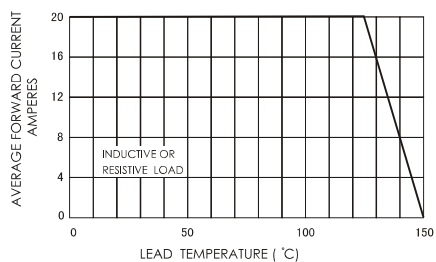


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

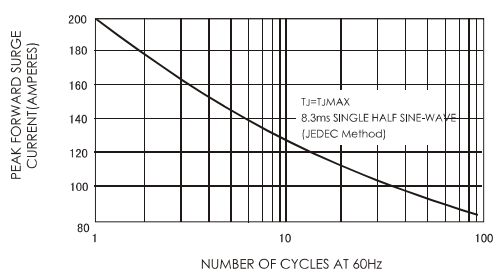


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

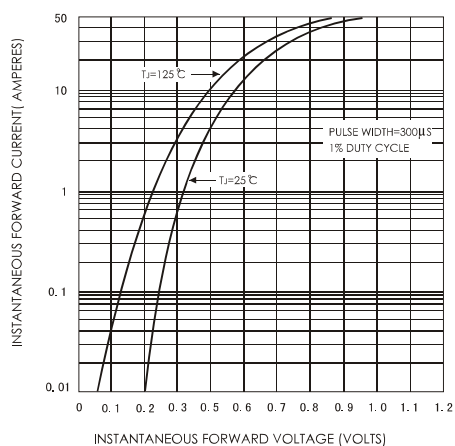


FIG.4-TYPICAL REVERSE CHARACTERISTICS

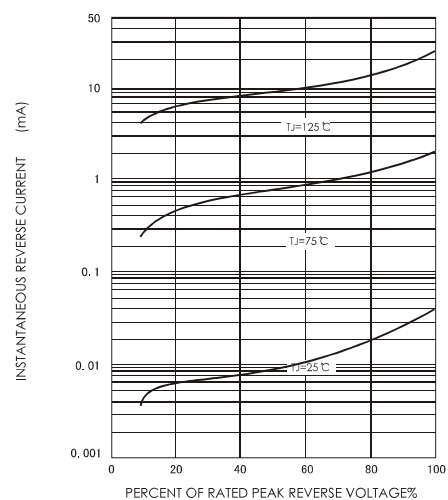


FIG.5-TYPICAL JUNCTION CAPACITANCE

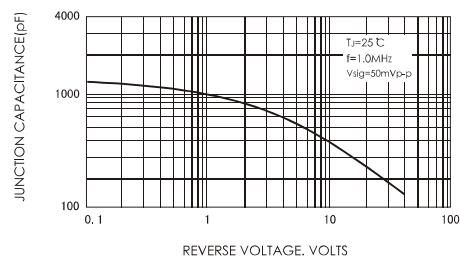
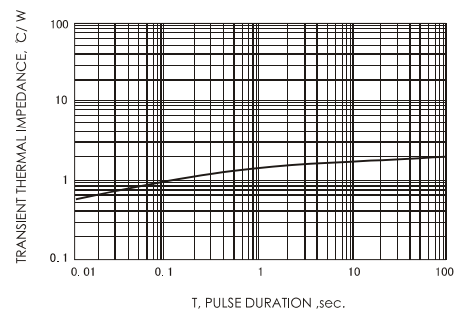
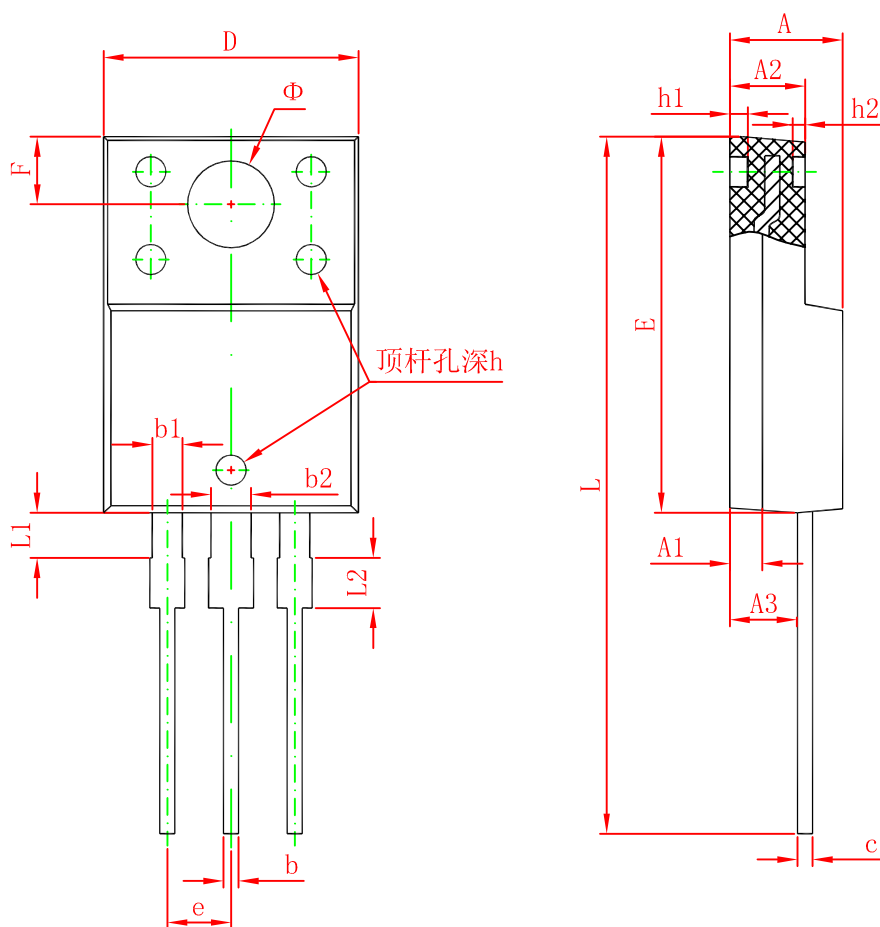


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



ITO-220AB Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.300	4.700	0.169	0.185
A1	1.300 REF.		0.051 REF.	
A2	2.800	3.200	0.110	0.126
A3	2.500	2.900	0.098	0.114
b	0.500	0.750	0.020	0.030
b1	1.100	1.350	0.043	0.053
b2	1.500	1.750	0.059	0.069
c	0.500	0.750	0.020	0.030
D	9.960	10.360	0.392	0.408
E	14.800	15.200	0.583	0.598
e	2.540 TYP.		0.100 TYP.	
F	2.700 REF.		0.106 REF.	
Φ	3.500 REF.		0.138 REF.	
h	0.000	0.300	0.000	0.012
h1	0.800 REF.		0.031 REF.	
h2	0.500 REF.		0.020 REF.	
L	28.000	28.400	1.102	1.118
L1	1.700	1.900	0.067	0.075
L2	1.900	2.100	0.075	0.083