

Features

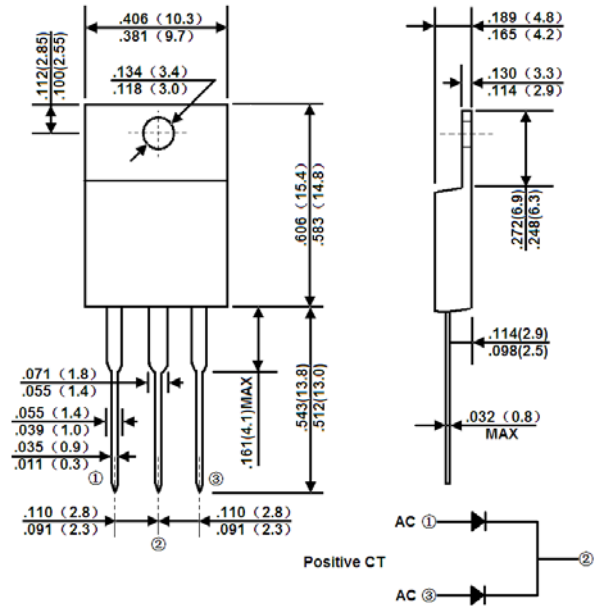
- * Low power loss, high efficiency
- * Guard-ring for overvoltage protection
- * High surge current capability
- * Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

ITO-220AB:



Mechanical Data

- * Case: ITO-220AB Molded plastic
- * Molding compound, UL flammability classification rating 94V-0
- * Terminal: Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 1A whisker test
- * Polarity: As marked
- * Mounting torque: 5 in-lbs maximum

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	ST20100FCT		ST20120FCT		Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100		120		V	
Maximum RMS Voltage	V_{RMS}	70		84		V	
Maximum D.C Blocking Voltage	V_{DC}	100		120		V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	20				A	
Peak repetitive forward current (Rated VR, square wave, 20KHz)	I_{FRM}	20				A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150				A	
Peak repetitive reverse surge current (Note 1)	I_{RRM}	1				A	
Maximum instantaneous forward voltage (Note 2)	V_F	TYP	MAX	TYP	MAX	V	
		IF=10A, T _J =25 °C	0.72	0.75	0.78		0.83
		IF=10A, T _J =125 °C	0.58	0.68	0.63		0.72
		IF=20A, T _J =25 °C	0.81	0.85	0.86		0.90
Maximum reverse current @ Rated VR	I_R	TYP	MAX	TYP	MAX	μA mA	
		T _J =25 °C	1.10	100	1.00		100
		T _J =125 °C	1.20	15	1.40	10	
Voltage rate of change (Rated VR)	dV/dt	10000				V/μs	
Typical Thermal Resistance	$R_{θJC}$	2.8		3.0		°C/W	
Operating junction temperature range	T _J	-55 to +150				°C	
Storage Temperature Range	T _{STG}	-55 to +150				°C	

Note:1、tp = 2.0 μs, 1.0KHz 2、Pulse test with PW=300μs, 1% duty cycle

Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

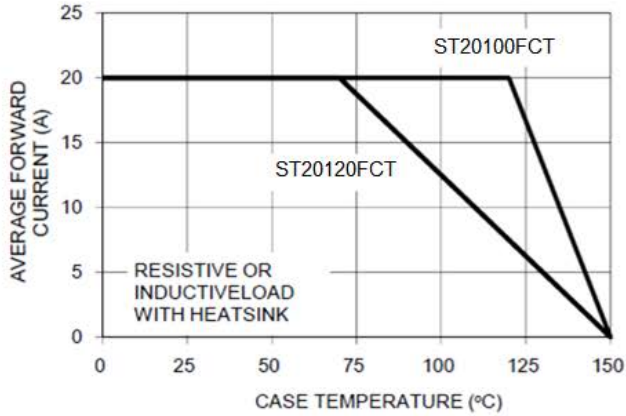


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

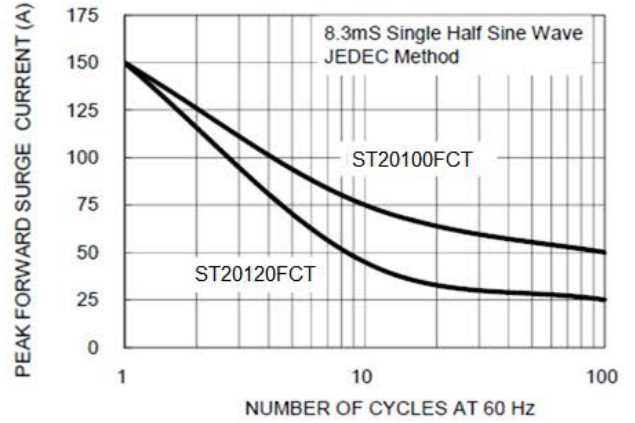


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

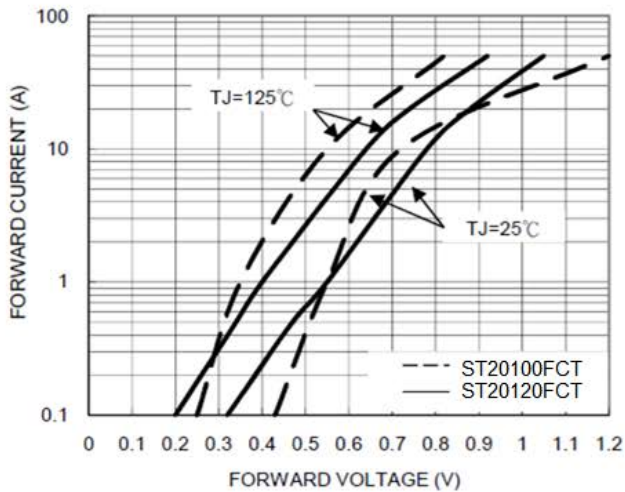


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

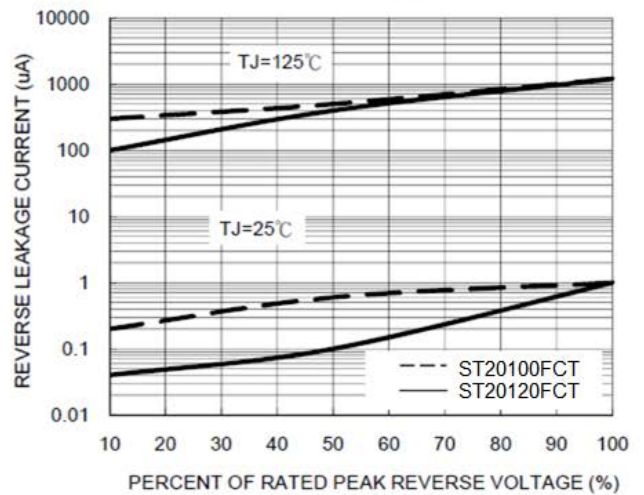


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

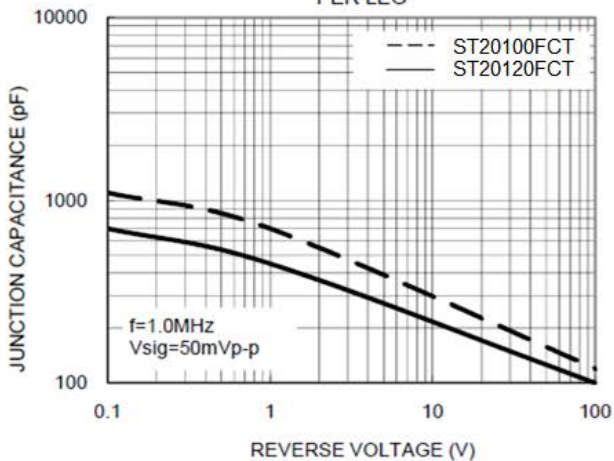
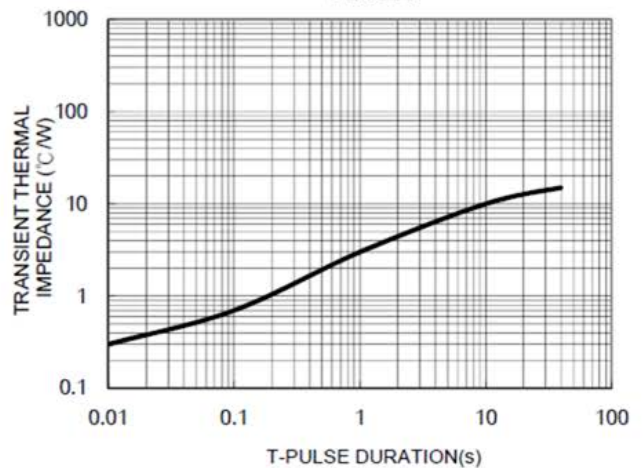


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG





ST20100FCT THRU ST20120FCT

Dual Common Cathode Schottky Rectifiers

Ordering Information

Part No.	Package	Packing
ST20100FCT~ST20120FCT	ITO-220AB	50pcs/Tube