

VOLTAGE RANGE: 300V

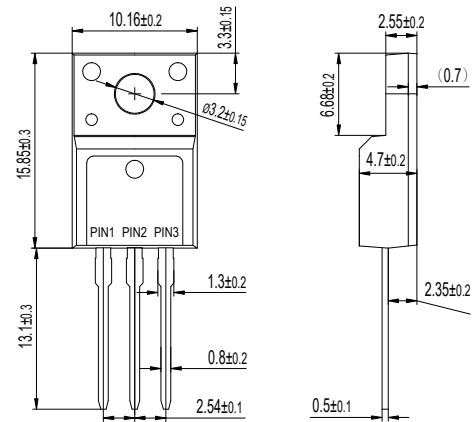
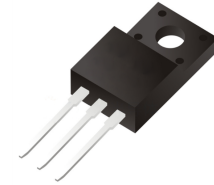
CURRENT: 20A

Features

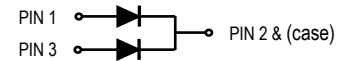
- Ultra low vf
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive

Mechanical Data

- Circuit figure: Common cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: ITO-220AB 1.70 grams



ITO-220AB



Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

RATINGS	SYMBOL	SBT20L300FCT	UNIT
Maximum repetitive reverse voltage	VRRM	300	V
Maximum RMS voltage	VRMS	210	V
Maximum DC blocking voltage	VDC	300	V
Maximum average forward current per device per diode	I _{AV}	20 10	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200	A
Typical thermal resistance per diode (Note 1)	R _{θ-JC}	4.5	°C/W
Operating junction temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Notes: 1. Thermal resistance from junction to case.

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Breakdown voltage per diode	V_{BR}	$I_R=0.5\text{mA}$	300	-	-	V	
Instantaneous forward voltage per diode	V_F	$I_F=10\text{A}$ $T_J=25^\circ\text{C}$	-	-	0.98	V	
		$I_F=10\text{A}$ $T_J=125^\circ\text{C}$	-	0.78	0.83	V	
Reverse current per diode	I_R	$V_R=300\text{V}$	$T_J=25^\circ\text{C}$	-	-	50	μA
			$T_J=125^\circ\text{C}$	-	-	15	mA

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

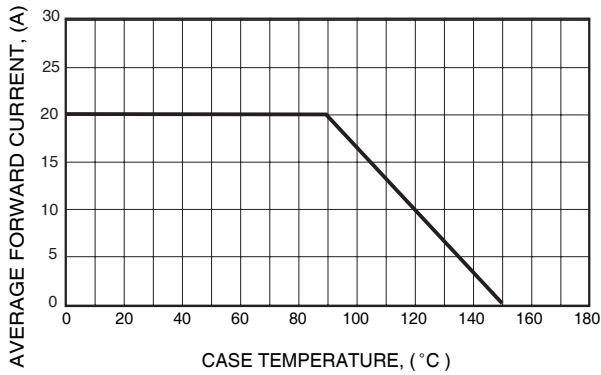


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

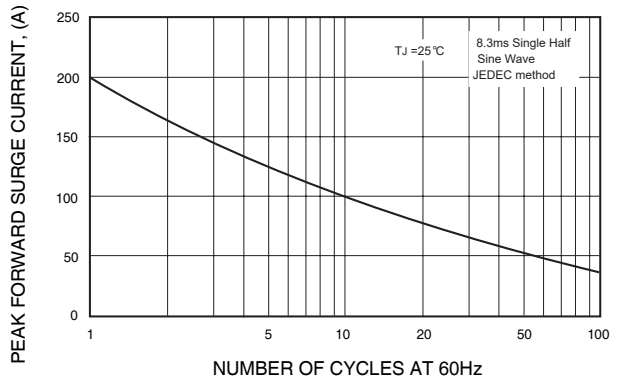


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

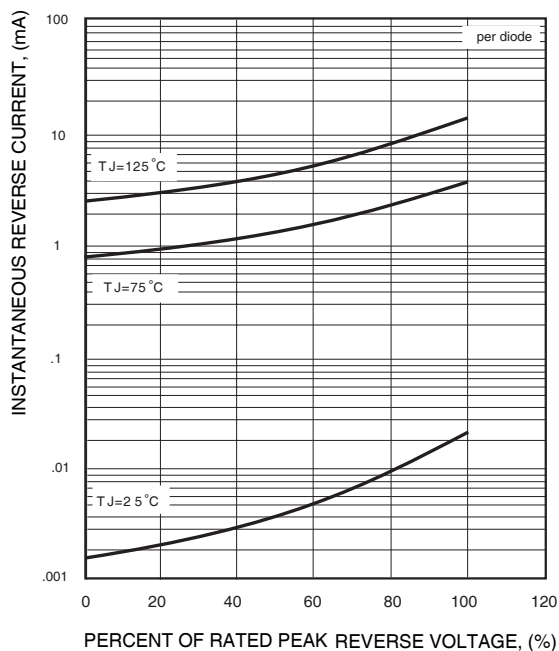


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

