



四川旭茂微科技有限公司

Sichuan Xu Mao Micro Technology Co., Ltd

SBT30L40 THRU SBT30L200
CT/FCT/CS

Schottky Diodes

Reverse Voltage-40to200v

Forward current-30A

Features

Schottky chip

Low forward voltage drop

Ideal for surface mounted applications

Low power loss, high efficiency

Plastic Case Material has UL Flammability

Mechanical Data

Package: TO-220AB, TO-220F, TO-263

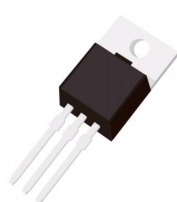
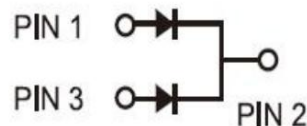
Terminals: Tin Plated leads, solderable per

Mil-STD-750 Method 2026

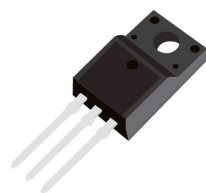
Polarity: As marked

Molding compound meets UL 94 V-0 flammability rating,

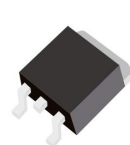
ROHS-compliant



TO-220AB



TO-220F



TO-263

Maximum Ratings (Ta=25°C Unless otherwise)

Type Number	SYMBOL	SBT 30L40	SBT 30L60	SBT 30L100	SBT 30L150	SBT 30L200	Umit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	60	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	60	100	150	200	V
Maximum Average Forward Rectified Current at TL = 100 °C	IO(AV)	30.0					A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	230.0					A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		460.0					A
Current squared time @1ms≤t8.3≤ms Tj=25°C , Rating of per diode	I²t	219.5					A²S
Maximum Forward Voltage at 3 0 .0A DC	V _{FM}	0.55	0.65	0.75	0.85	0.9	V
Maximum Reverse Current TA = 25°C	IR	0.2		0.1			mA
at Rated DC Blocking Voltage TA = 100 °C		50		20			mA
Typical Junction Capacitance	CJ	400		300			pF
Typical Thermal Resistance TO-220AB,TO-263 TO-220F	R _{QJC}	2.0					°C/W
		4.0					
Operating Junction Temperature Range	T _J	—55to+150					°C
Storage Temperature Range	T _{STG}	—55to+150					°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

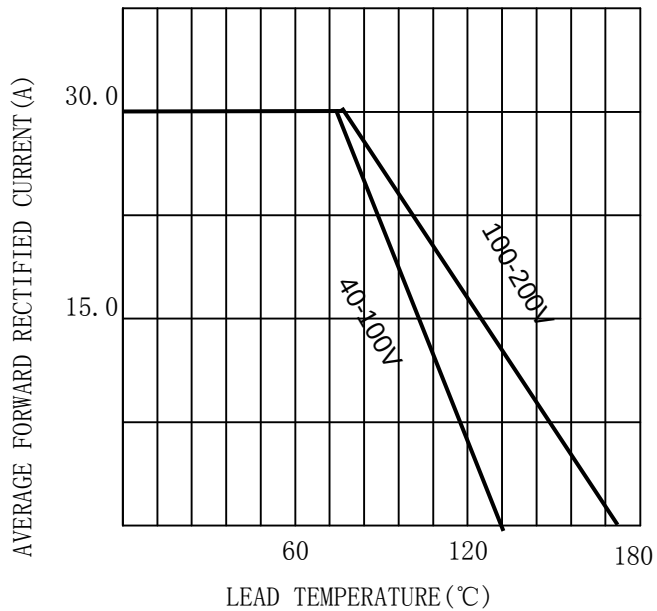


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

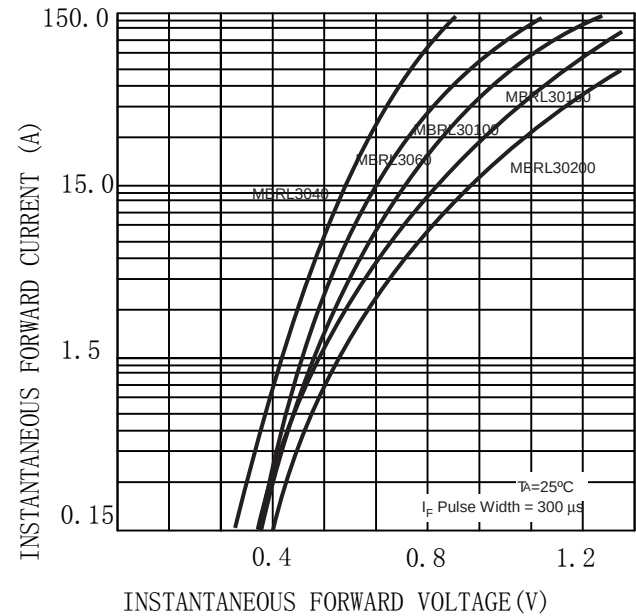


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

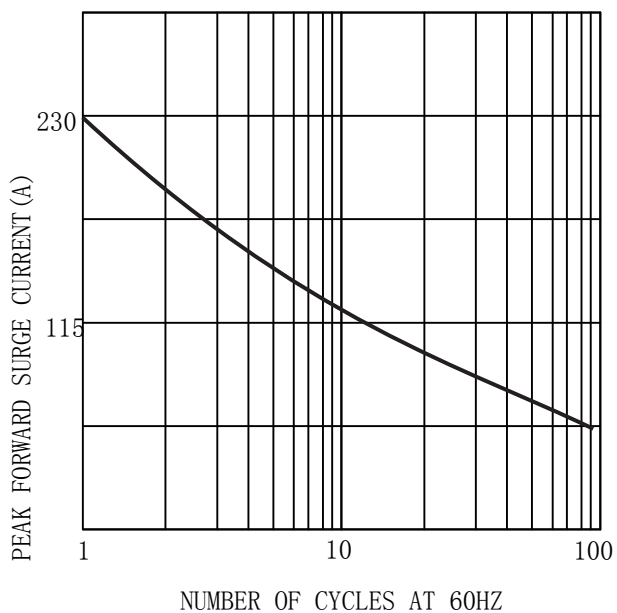
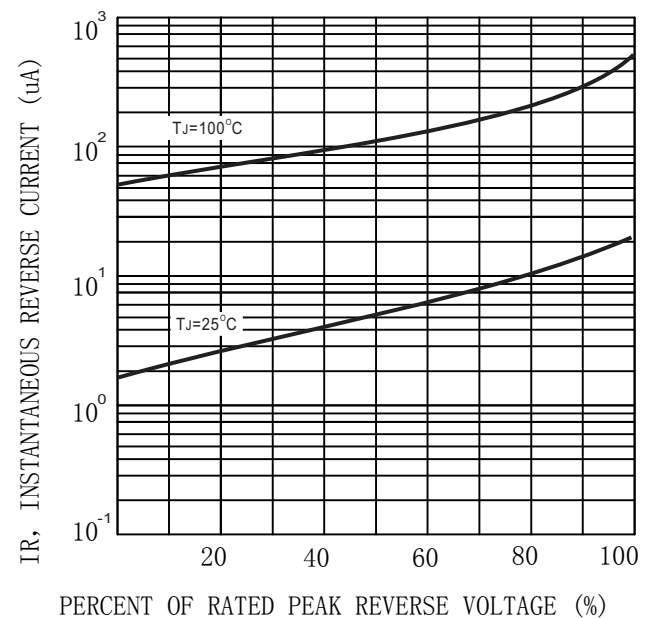


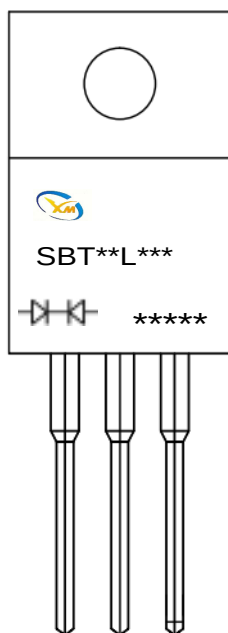
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION

TO-220AB/CT



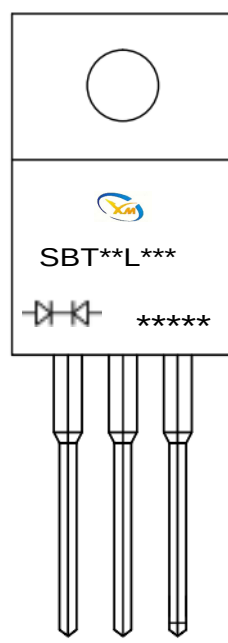
 = Polar line

 = Logo

***** = Date Code Marking

SBTL***** = Marking Code

TO-220F/FCT



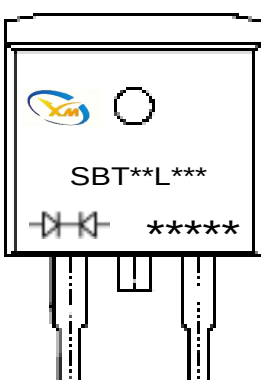
 = Polar line

 = Logo

***** = Date Code Marking

SBTL***** = Marking Code

TO-263/CS



 = Polar line

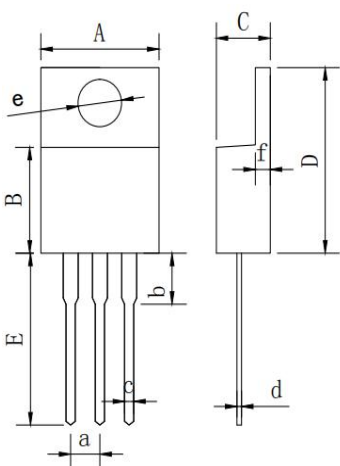
 = Logo

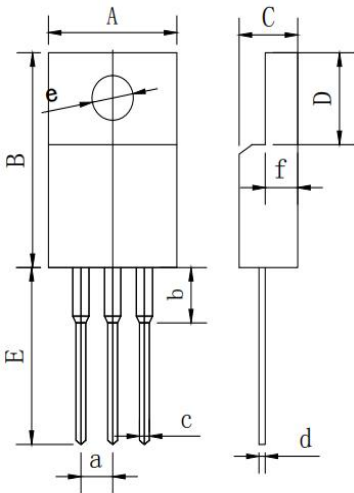
***** = Date Code Marking

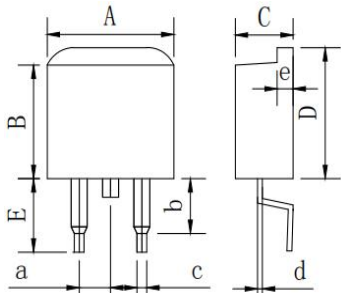
SBTL***** = Marking Code



Package Outline Dimensions millimeters

T0-220AB/CT						
	DIM	INCHES		MM		NOTE
		min	max	min	max	
	A	—	0.41	—	10.30	
	B	0.33	0.34	8.30	8.70	
	C	0.18	0.19	4.50	4.90	
	D	0.57	0.60	14.60	15.20	
	E	0.53	0.56	13.50	14.10	
	a	0.10	0.10	2.45	2.65	
	b	—	0.16	—	4.10	
	c	0.03	0.04	0.72	0.92	
	d	0.01	0.02	0.30	0.50	
	e	—	0.15	—	3.80	Ø
	f	0.05	0.06	1.20	1.40	

T0-220F/FCT						
	DIM	INCHES		MM		NOTE
		min	max	min	max	
	A	—	0.41	—	10.30	
	B	0.61	0.64	15.60	16.20	
	C	0.18	0.19	4.50	4.90	
	D	0.26	0.28	6.60	7.00	
	E	0.50	0.53	12.80	13.40	
	a	0.10	0.10	2.45	2.65	
	b	—	0.16	—	4.10	
	c	0.03	0.04	0.72	0.92	
	d	0.02	0.02	0.40	0.60	
	e	—	0.15	—	3.80	Ø
	f	0.09	0.11	2.40	2.80	

T0-263/CG						
	DIM	INCHES		MM		NOTE
		min	max	min	max	
	A	—	0.41	—	10.30	
	B	0.33	0.34	8.30	8.70	
	C	0.18	0.19	4.50	4.90	
	D	0.38	0.39	9.60	10.00	
	E	0.21	0.22	5.30	5.70	
	a	0.10	0.10	2.45	2.65	
	b	—	0.16	—	4.10	
	c	0.03	0.04	0.72	0.92	
	d	0.01	0.02	0.30	0.50	
	e	0.05	0.06	1.20	1.40	



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