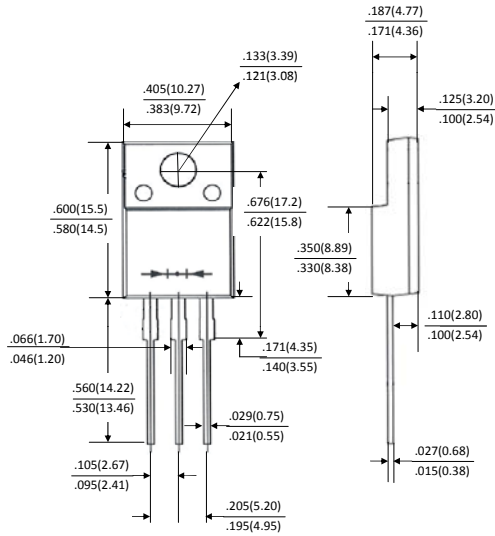


Schottky Barrier Rectifiers



ITO-220AB

Dimensions in inches and (millimeters)



Ordering Information

Part Number	Remark
SP20xxC	General
SP20xxC-H	Halogen Free
SP20xxC-Q	Automotive

PRIMARY CHARACTERISTICS

I_F	20A
V_{RRM}	20~200V
I_{FSM}	150A
V_F	0.55V, 0.75V, 0.85V, 0.92V
T_J max	125°C, 150°C

Features

- Guard Ring for over voltage Protection
- High forward surge capability
- High frequency operation
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

Mechanical Data

- Case: ITO-220AB
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over copper Lead frame. Solderable per MIL-STD-202
- Weight: 1.689 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	SP20 20C	SP20 30C	SP20 40C	SP20 45C	SP20 50C	SP20 60C	SP20 80C	SP20 100C	SP20 150C	SP20 200C	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V	
Maximum average forward rectified current (Total) (Per Leg)	I_F	20 10										A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0										A	
Maximum Instantaneous Forward Voltage IF=10A @ 25°C	V_F	0.55			0.75			0.85		0.92		V	
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I_R	0.5 20					0.2 5					mA	
Typical Junction Capacitance(NOTE1)	C_j	600				400				300			pF
Typical Thermal Resistance	$R_{\theta JC}$	3										°C/W	
Operating Temperature Range	T_J	-55 to +125						-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150										°C	

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

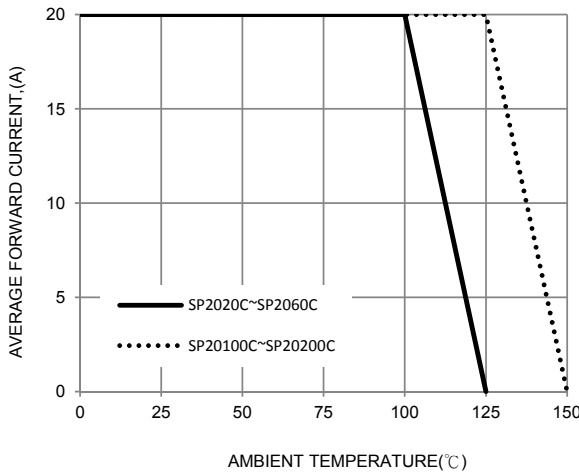


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

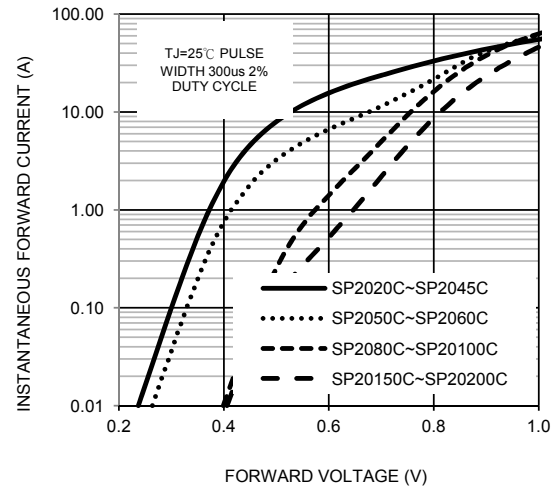


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

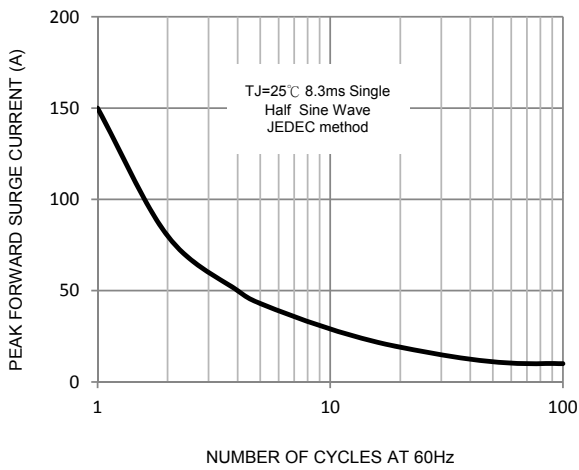


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

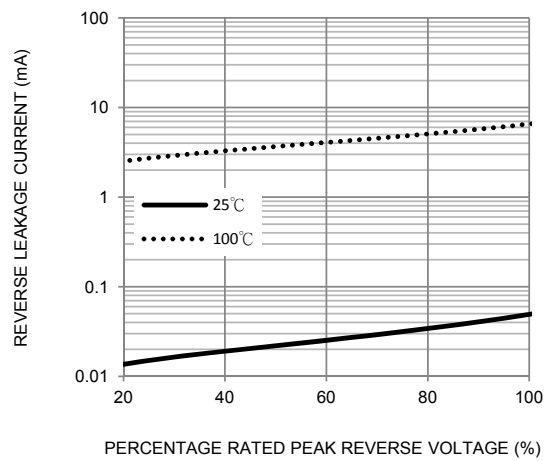


FIG. 5-TYPICAL JUNCTION CAPACITANCE

