



Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

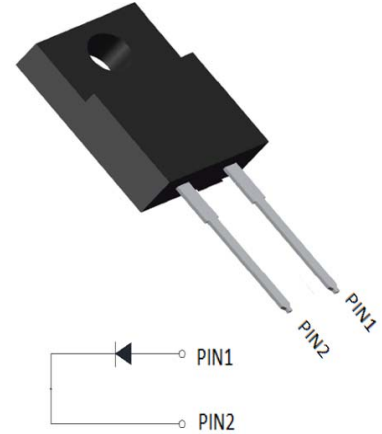
Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- Package: ITO-220AC
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

ITO-220AC



■Maximum Ratings ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DSI20-10
Device marking code			DSI20-10
Maximum Repetitive peak reverse voltage	V_{RRM}	V	1000
Maximum RMS Voltage	V_{RMS}	V	700
Maximum DC Blocking Voltage	V_{DC}	V	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, TL (FIG.1)	I_O	A	20
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	I_{FSM}	A	300
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^{\circ}\text{C}$			500
Current squared time @1ms≤t≤8.3ms $T_j=25^{\circ}\text{C}$	I^2t	A^2s	166
Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-55 ~ +175
Junction Temperature	T_j	$^{\circ}\text{C}$	-55 ~ +175

■Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DSI20-10
Maximum instantaneous forward voltage	V_F	V	$I_{FM}=20\text{A}$	1.1
Maximum DC reverse current at rated DC blocking voltage	I_R	μA	$T_j=25^{\circ}\text{C}$	5
			$T_j=125^{\circ}\text{C}$	100
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	55
Typical Thermal Resistance	$R_{\theta JC}$	$^{\circ}\text{C/W}$	Junction to Case	1.15

■ Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DSI20-10	Approximate 1.47	50	1000	5000	Tube

■ Characteristics(Typical)

FIG.1: Io-TL Curve

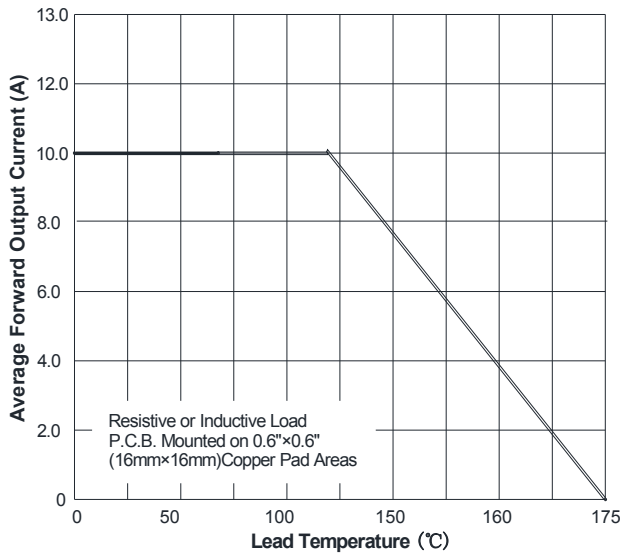


FIG.2: Forward Surge Current Capability

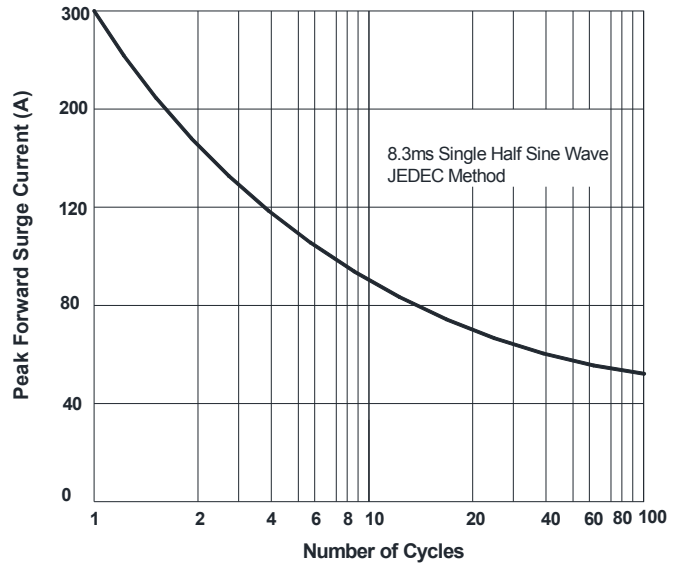


FIG.3: Typical Forward Voltage

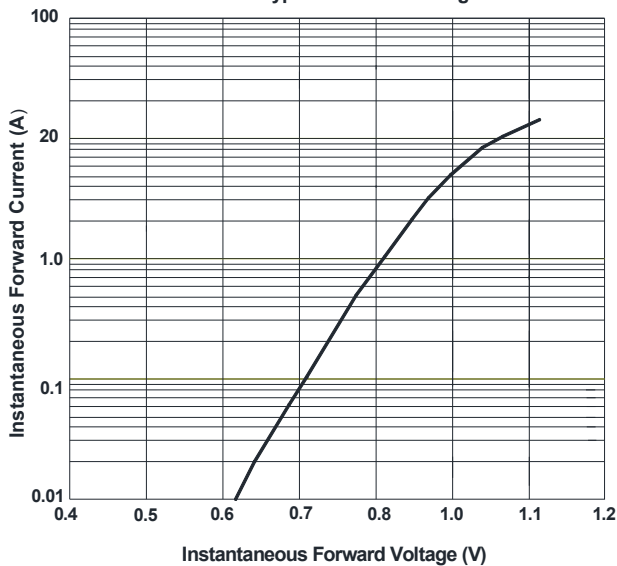
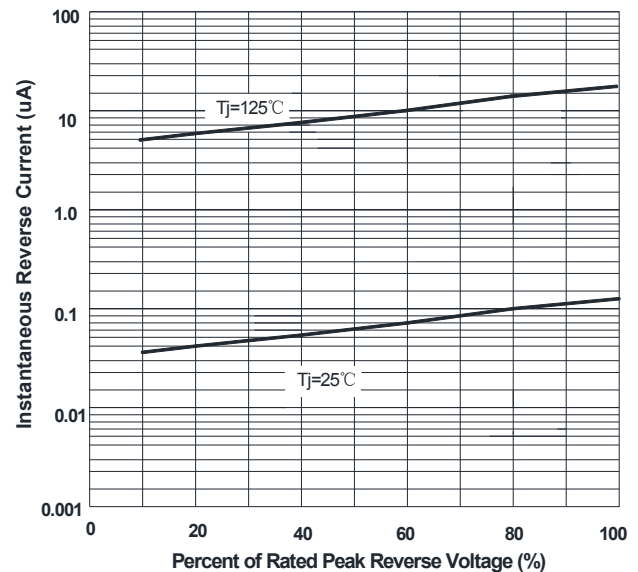
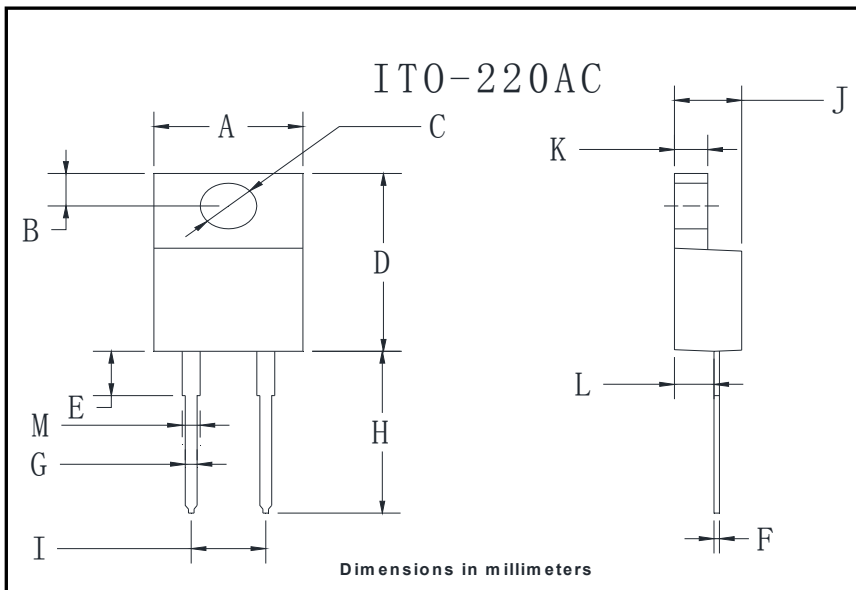


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions



DSI20-10



IT0-220AC		
Dim	Min	Max
A	9.7	10.7
B	2.15	3.25
C	2.6	3.8
D	14.4	15.9
E	3.1	4.5
F	0.4	0.8
G	0.4	0.9
H	12.7	14.2
I	3.6	5.9
J	3.9	5.1
K	2.1	3.56
L	2.1	3.2
M	1.0	1.8

Packge	Packing	Box Size L×W×H(mm)	Quatity(pcs/box)	Carton Size L×W×H(mm)	Quatity(pcs/carton)
ITO-220	50pcs/Tube	558×148×38	1000	565×225×170	5000