/ Descriptions

TO-3P

Schottky Barrier Diode in a TO-3P Plastic Package.

/ Features

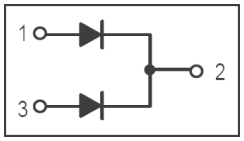
Low forward voltage drop, low power losses, High efficiency operation.

/ Applications

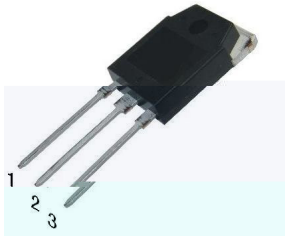
OR-ing DC-DC

For use in high frequency inverters, switching power supplies, freewheeling diodes OR-ing diode, dc-to-dc converters and reverse battery protection.

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	150	V
RMS Reverse Voltage	V_{RMS}	105	V
Average forward current	$I_{F(AV)}$	2 × 20	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	300	A
Thermal Resistance Junction to Ambient case	$R_{\theta Jc}$	1.4	/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	

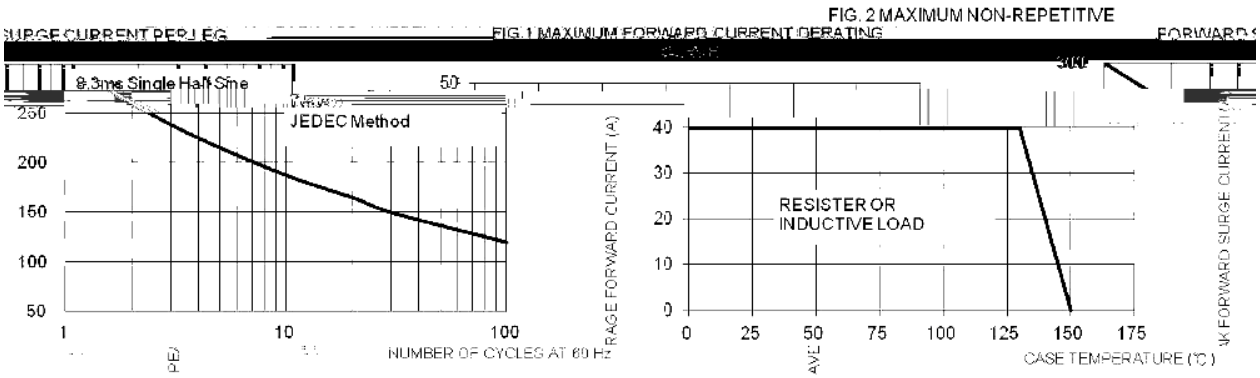
/ Electrical Characteristics(Ta=25)

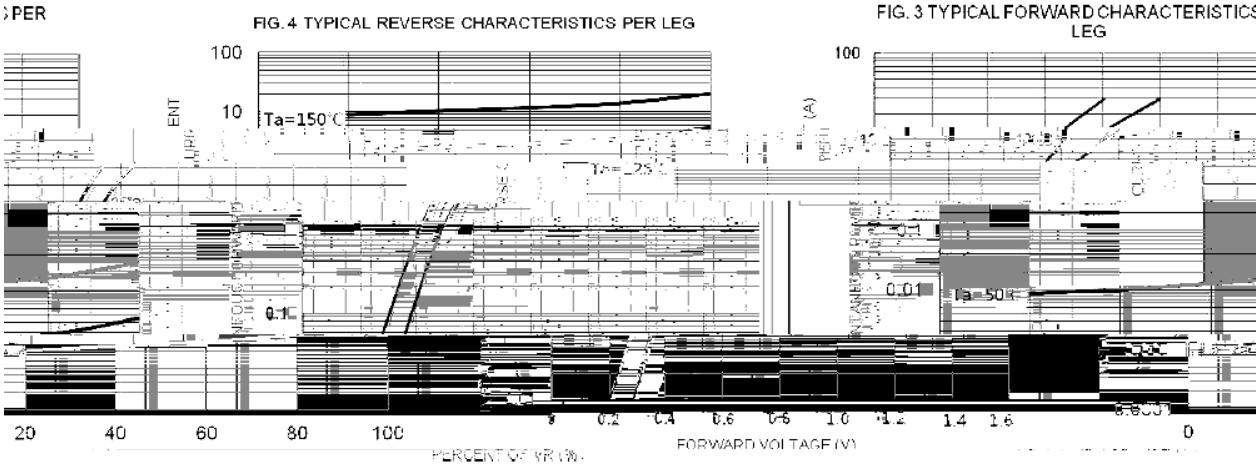
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V_{BR}	I_R=1mA(Ta=25)	150			V
Forward Voltage	V_F	I_F =5A(Ta=25)		0.68		V
		I_F =10A(Ta=25)		0.76		V
		I_F =20A(Ta=25)		0.89	1.05	V
		I_F =5A(Ta=125)		0.56		V
		I_F =10A(Ta=125)		0.63		V
		I_F =20A(Ta=125)		0.73	0.85	V
Instantaneous Reverse current (Note 1)	I_R Note 1	V_R=150V(Ta=25)		3.0	30	μA
		V_R=150V(Ta=125)		5.0	15	mA

/Notes

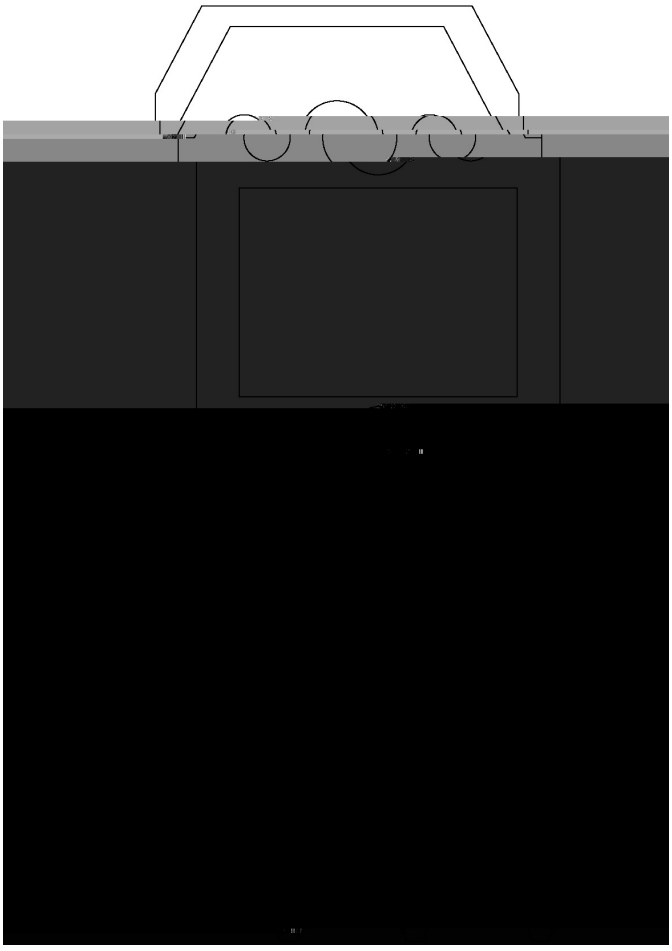
1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip.

/ Electrical Characteristic Curve





/ Marking Instructions



( ) / Temperature Profile for Dip Soldering(Pb-Free)



					Note:
1	25	150	60	90sec;	1.Preheating:25~150 , Time:60~90sec.
2	255±5			5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3		2	10	/sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp.:270±5	Time:10±1 sec

/ Packaging SPEC.

/ TUBE

Package Type	Units					Dimension		(unit mm^3)
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-3P	30	15	450	5	2250	497.5×46×8	555×164×50	575 290 180

/ Notices