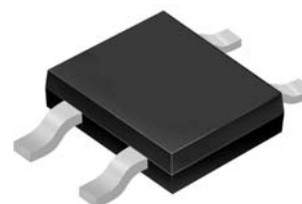


TMB

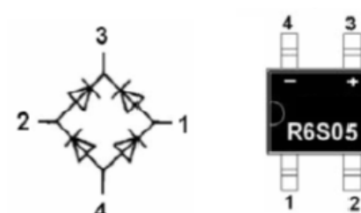
Features

- ◇ Ultra low leakage current $I_R < 2\mu A$, $T_A = 125^\circ C$
- ◇ No solder used, real fully in line with lead free
- ◇ Package thickness is 1.2 mm
- ◇ High ESD > 12 KV (HBM model)
- ◇ Plastic material has U/L flammability classification 94V-0
- ◇ High temperature soldering guaranteed: 260°C/10s (Reflow)
 350°C/ 3s (Manual welding)



Mechanical Data

- ◇ Mounting position : Any
- ◇ Weight : 58 mg (approximately)
- ◇ Marking Code : R6S05



Ordering Information (example)

Part No.	Package	Packing	Packing code	Packing code (Green)	Marking	Manufacture code
TMBR6S05	TMB	5K / 13" Reel	R7	R7G	R6S05	D0

Note : Detail please see "Ordering Information(detail, example)" below.

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Parameter	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	600	V
RMS Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_{DC}	600	V
Average Forward Rectified Current @ $T_A = 25^\circ C$	$I_{F(AV)}$	0.5	A
Maximum Continuous Forward Rectified Current @ $T_A = 25^\circ C$	I_{max}	2	A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave	I_{FSM}	12	A
Thermal Resistance	$R_{\theta JA}$	200	°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

Electrical Characteristics

Parameter	Test Conditions	Symbol	Value	Units
Reverse Current	$V_{RM} = V_{RRM}, T_A = 25^\circ C$	I_R	0.5	μA
	$V_{RM} = V_{RRM}, T_A = 125^\circ C$		2.0	
Forward Voltage	$I_F = 0.25 A, T_A = 25^\circ C$	V_F	1.0	V

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Reverse Voltage Characteristics

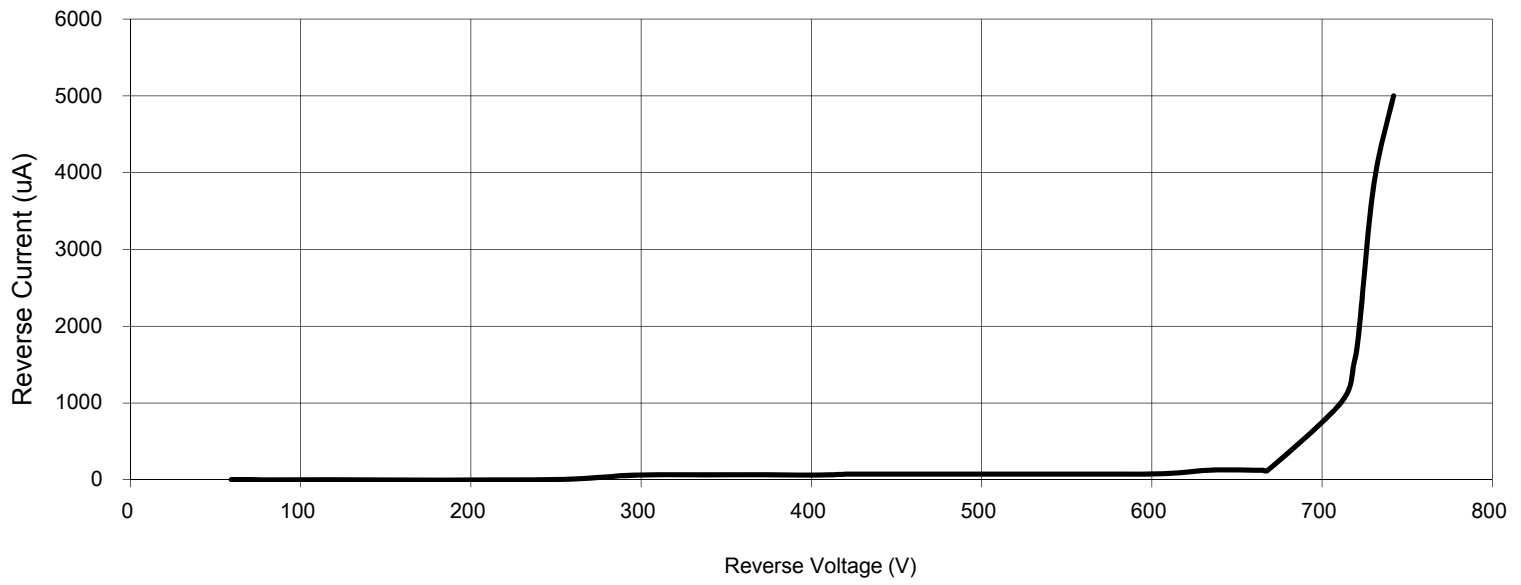


Fig. 2 Forward Derating Curve

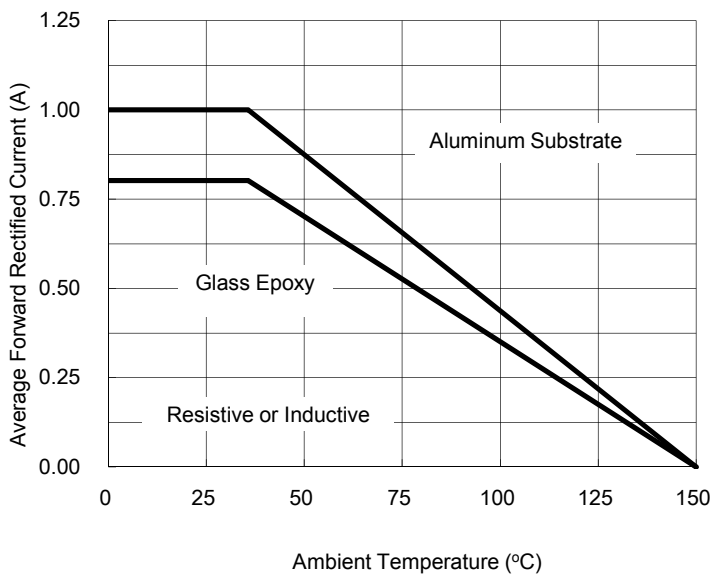


Fig. 3 Typical Reverse Characteristics

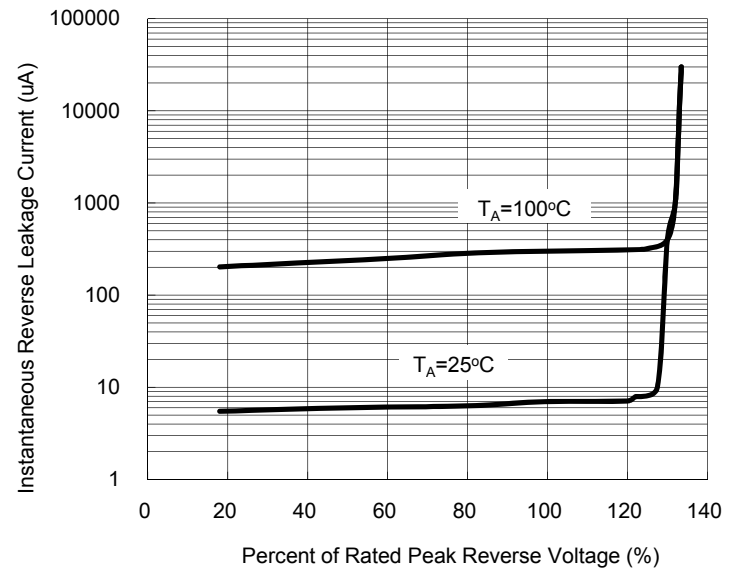
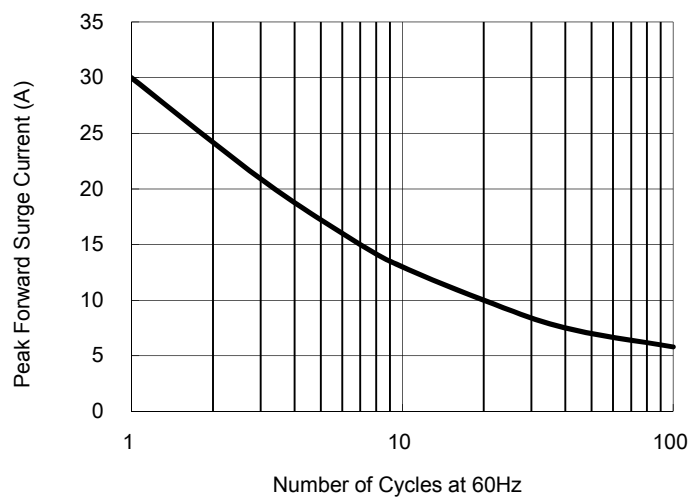


Fig. 4 Peak Forward Surge Current

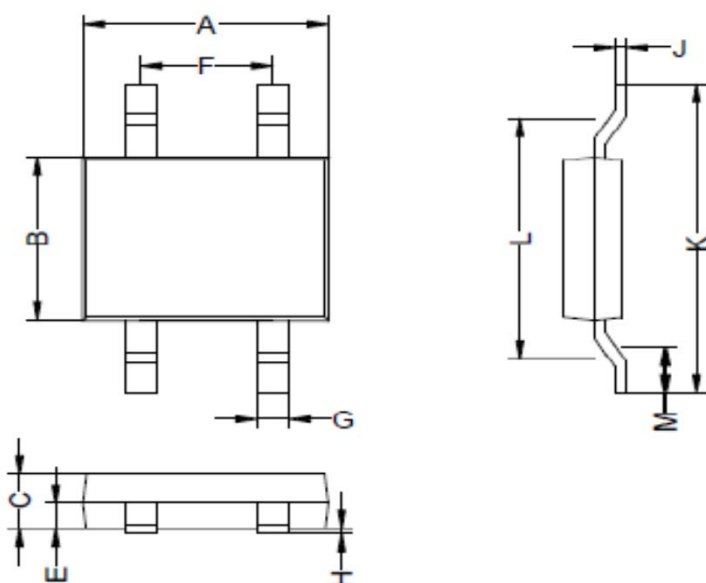


Ordering information (Detail, example)

Part No.	Package	Packing	Packing code	Packing code (Green)	Marking	Manufacture code (Note)
TMBR6S05	TMB	5K / 13" Reel	R7	R7G	R6S05	
TMBR6S05	TMB	5K / 13" Reel	R7	R7G	R6S05	D0

Note : Manufacture special control, if empty means no special control requirement.

Dimensions



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.50	4.70	0.177	0.185
B	3.60	3.80	0.142	0.150
C	1.20 Typ.		0.049 Typ.	
E	0.45	0.65	0.018	0.026
F	2.60	2.80	0.102	0.110
G	0.60	0.80	0.024	0.031
H	0.05	0.15	0.002	0.006
J	0.20 Typ.		0.008 Typ.	
K	6.60	7.00	0.260	0.276
L	5.10	5.50	0.201	0.217
M	0.90	1.10	0.035	0.043