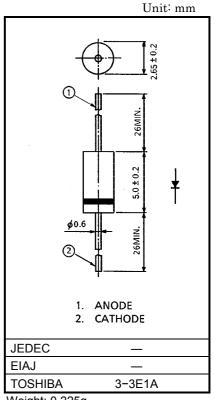
TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

1GWJ42

HIGH SPEED RECTIFIER APPLICATIONS

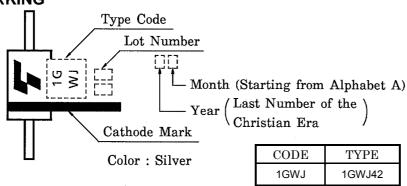
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	٧
Average Forward Current	I _{F (AV)}	1.0	Α
Peak One Cycle Surge Forward Current (Non-Repetitive)	I _{FSM}	40 (50Hz)	Α
Junction Temparature	Tj	-40~125	°C
Storage Temparature Range	T _{stg}	-40~125	°C



Weight: 0.225g



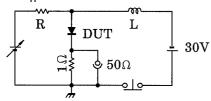


1

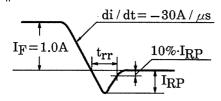
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Peak Forward Voltage	V_{FM}	I _{FM} =1.0A	_	_	0.55	V
Repetitive Peak Reverse Current	I _{RRM}	V _{RRM} =40V	_	_	0.5	mA
Reverse Recovery Time (Note 1)	t _{rr}	I _F =1.0A, di / dt=-30A / μs	_	_	35	ns
Junction Capacitance	Cj	V _R =10V, f=1MHz	_	52	_	pF
Thermal Resistance (Junction to Ambient)	R _{th (j−a)}	DC (Note 2)	_	_	125	°C/W
Thermal Resistance (Junction to Lead)	R _{th (j-l)}	DC (Note 2)	_	_	60	°C/W

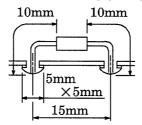
Note 1: $t_{\Gamma\Gamma}$ TEST CIRCUIT

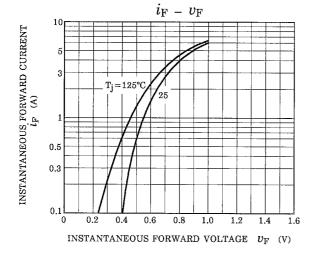


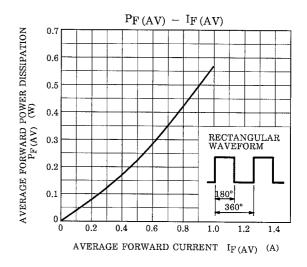
 $t_{\mbox{\it fr}}$ WAVEFORM



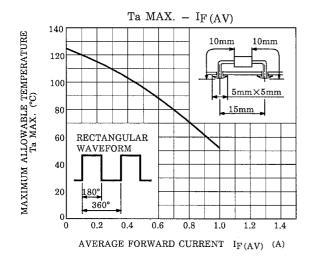
Note 2: THERMAL RESISTANCE

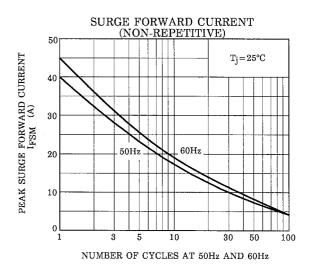


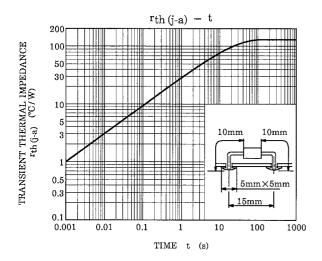


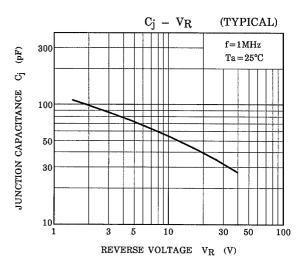


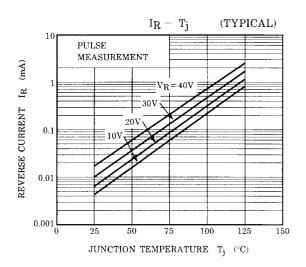
2

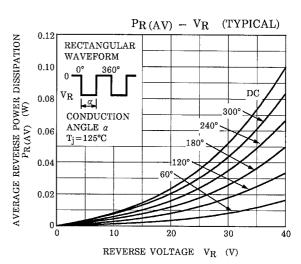












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