TOSHIBA 05NH45

TOSHIBA FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

05NH45

SWITCHING TYPE POWER SUPPLY APPLICATIONS

• Repetitive Peak Reverse Voltage : $V_{RRM} = 1000V$ • Average Forward Current : $I_{F(AV)} = 0.5A$ • Very Fast Reverse-Recovery Time : $t_{rr} = 200$ ns (Max.)

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT | |
|-----------------------------------|---------------------|-----------|------|--|
| Repetitive Peak Reverse Voltage | v_{RRM} | 1000 | V | |
| Average Forward Current (Ta=25°C) | I _{F (AV)} | 0.5 | A | |
| Peak One Cycle Surge Forward | TECA | 20 (50Hz) | Α | |
| Current (Non-Repetitive) | | 22 (60Hz) | A | |
| Junction Temperature Range | T_{j} | -40~150 | °C | |
| Storage Temperature Range | ${ m T_{stg}}$ | -40~150 | °C | |

1. ANODE
2. CATHODE

JEDEC —
EIAJ —
TOSHIBA 3-3E1A

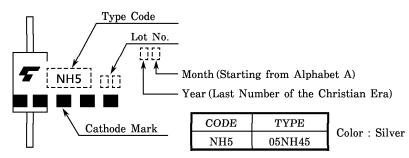
Unit in mm

Weight: 0.225g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

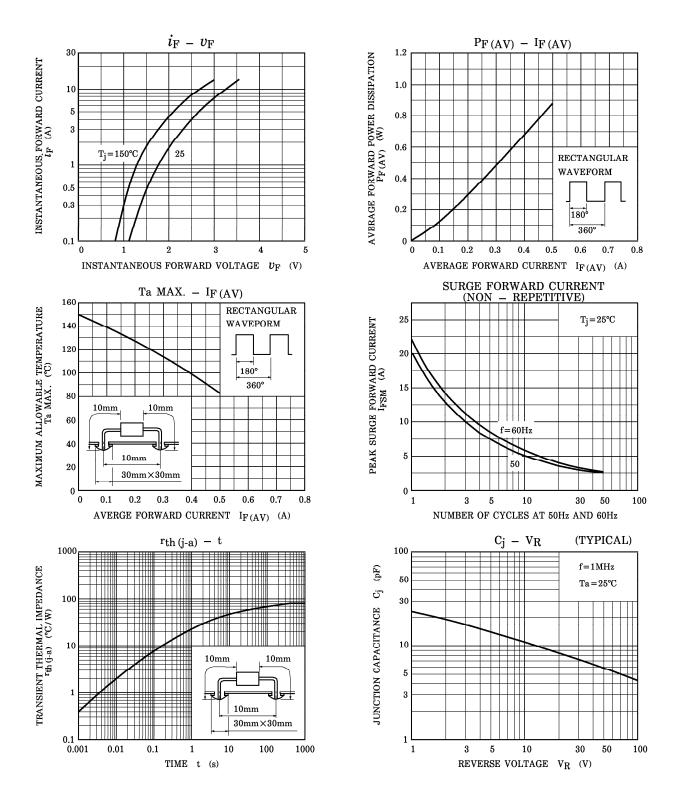
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------------------|-----------------------|--------------------------------|------|------|------|----------------|
| Peak Forward Voltage | $v_{	extbf{FM}}$ | $I_{\text{FM}} = 0.5 A$ | | | 1.5 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_{ m RRM}$ =1000V | _ | 1 | 100 | μ A |
| Reverse Recovery Time | t_{rr} | $I_F=1A$, di/dt= $-30A/\mu s$ | _ | _ | 200 | ns |
| Forward Recovery Time | t_{fr} | $I_{\mathbf{F}} = 1.0 A$ | _ | _ | 750 | ns |
| Thermal Resistance | R _{th (j-a)} | Junction to Ambient | _ | _ | 75 | °C/W |

MARKING



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